DOCUMENT RESUME

ED 127 062 HE 009 335

AUTHOR	Harris, James J.
TITLE	The North Dakota Indian Reservation Economy: A Descriptive Study. North Dakota Economic Studies Number 11.
INSTITUTION	North Dakota Univ., Grand Forks. Bureau of Business and Economic Research.
REPORT NO	ND-ES-11
PUB DATE	Aug 75
NOTE	137p.
EDRS PRICE	MF-$0.83 HC-$7.35 Plus Postage.
DESCRIPTORS	Academic Achievement; Age; Agency Role; Area Studies; Birth Rate; Capital; Community Development; Death; Diseases; *Economic Development; Employment Trends; Family Characteristics; Family Income; Health; Housing; Labor Force; Land Use; *Manpower Development; *Outreach Programs; Population Trends; *Reservations (Indian); Resource Allocations; *Socioeconomic Influences; Tables (Data); Welfare Services
IDENTIFIERS	*North Dakota

ABSTRACT

Economic development remains one of the most important objectives of American Indian reservations. Various programs for developing the reservations' resources have been implemented. Due to the multiplicity of needs, development policy has been multi-faceted: health programs to upgrade physical well-being; educational programs to enhance scholastic achievement; manpower programs to increase skill levels and employability; and job-creation programs and industrial projects to reduce unemployment. Thus, reservation life has improved. However, in order to determine the degree of improvement, the economic position of reservations needs clarification. This study describes the present economic status of North Dakota's Indian population and relates the current situation to major development programs of the last decade and other identifiable factors. Data pertains to: social and economic characteristics--age, sex, family characteristics, labor force participation, employment status, occupational structure, income for persons and families, health and education; health, education, and welfare trends and programs; manpower and community developments--role of the Office of Economic Opportunity, employment and adult training programs, overall assessment of manpower programs; and land and capital resources. (Author/NQ)

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NORTH DAKOTA ECONOMIC STUDIES — NUMBER 11

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The North Dakota Indian Reservation Economy: A Descriptive Study

by

James J. Harris

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BUREAU OF BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF NORTH DAKOTA
August, 1975

ACKNOWLEDGMENTS

A number of persons have my gratitude for their assistance in the preparation of this study. I am especially indebted to Mr. David Torkelson of the North Dakota Business and Industrial Development Department and Mrs. Betty Laverdure, Resource Development Specialist for the Turtle Mountain Reservation, for providing needed materials. The help of Mr. Earl Azure, Director, North Dakota Indian Affairs Commission, and Mrs. Glennice Kom, Aberdeen Area Office, Bureau of Indian Affairs, is also deeply appreciated. I also want to thank Dr. Larry J. Dobesh, Director of the Bureau of Business and Economic Research, for editing the manuscript and Dr. William E. Koenker, Vice President of Academic Affairs at the University of North Dakota, for providing funds which helped to make this study possible.

J.J.H.

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CHAPTER 1

BACKGROUND

A. Introduction

Economic development has been a goal of Indian tribes for many years and remains one of the most important objectives of reservations today. Various programs for developing the resources of reservations have been implemented, especially since the Economic Opportunity Act of 1964. Because of the multiplicity of needs, development policy has been multi-faceted: health programs to upgrade physical well-being; educational programs to enhance scholastic achievement; manpower programs to increase skill levels and employability; and job-creation programs and industrial projects to reduce unemployment. Since reservation life has improved, there is a tendency to view the programs favorably though little is actually known about their effectiveness.

The economic position of reservations needs clarification in order to determine the degree of improvement which has occurred and to assess the potential for future development. The purpose of this study is to describe as clearly as possible the present economic status of the Indian population in North Dakota and to relate the current situation to major development programs of the last decade and other identifiable factors. This of necessity involves examining reservation resources and tribal objectives. In brief, the intention is to present an overall view of the economic position of the Indian population with special reference to reservation conditions.

Many of the present conditions have historical roots and are stories in themselves. This study will not pursue these roots in detail for such an examination, although useful, would obscure the principal objective of the paper. Let it be said, however, the situation is due largely to efforts to change Indians into farmers. Members of the newly dominant culture, many of whom had good intentions, thought in terms of "civilizing" Indians which, in effect, meant transforming them into whites.

Lost pride and dependency continue and it has been only in recent years that this trend has shown signs of reversing. Developments during the last ten years appear to have led to a revitalization of Indian values and a freer expression of these values. For example, the demand for more resources is one way in which these new values are emerging.

Prospects are better to the extent that material well being depends on physical and mental health. However, material and financial resources appear to be binding if the desire by most Indians is to live a reservation way of life. As shall be seen, progress in health and education are necessary but insufficient in themselves to overcome most reservation problems. The issue comes down to capital: human, material, and financial.

B. Comparative Status of the Indian Population

A general perspective of the Indian population can be achieved by comparing the status of Indians with other minorities at the level of the nation, the region, and the state. Such a procedure allows identification of the rank of Indians relative to other groups at three levels of aggregation, with inter-group analysis within these geographic divisions proving particularly valuable.

Variables which could be used in this connection are extensive; however, only three magnitudes are employed here - - educational achievement, personal income, and population concentration. The reason for including personal income is obvious but the selection of the other two requires brief explanation. These measures are included because they are important determinants of income. For example, low-income levels are associated with high concentrations of minorities who are on the average poorly educated. In this regard, current conditions are placed in perspective by examining changes in these variables over time.

1. Population

North Dakota has the fifth largest Indian population of the twelve states in the North Central region. The region itself contains 19 percent of the total Indian population of the United States (Table 1), which is 3 percent lower than twenty years ago when it ranked second behind the West. Correspondingly North Dakota was surpassed by Michigan in terms of Indian population and slipped one notch in the regional rankings.

Over this period the South and Northeast had the highest rate of Indian population growth while the West and North Central regions each experienced relative declines. From the standpoint of the nation, the Indian population more than doubled between 1950 and 1970 and increased over 50 percent during the last decade alone. This translates into a growth rate significantly above the rate for other races.

TABLE 1

REGIONAL DISTRIBUTION, EDUCATIONAL ACHIEVEMENT, AND MEDIAN INCOME OF THE U.S. NON-WHITE POPULATION, 16 YEARS OLD AND OVER, BY RACE, BY REGION, 1970

	United States	Northeast	North Central	South	West
Negro[a]					
Population	100.0	19.2	20.3	53.0	7.5
Education	9.8	10.7	10.6	8.7	11.9
Income					
Male	4158.0	5525.0	5808.0	3310.0	5164.0
Female	2041.0	3076.0	2603.0	1574.0	2723.0
Indian[b]					
Population	100.0	6.0	18.9	25.5	49.6
Education	10.5	11.0	10.6	10.4	10.4
Income					
Male	3509.0	5084.0	3529.0	3454.0	3322.0
Female	1697.0	2253.0	1775.0	1721.0	1571.0
Japanese[c]					
Population	100.0	6.7	7.3	4.8	81.2
Education	12.5	12.7	12.6	12.4	12.5
Income					
Male	7574.0	7043.0	7159.0	4997.0	7702.0
Female	3236.0	2891.0	2785.0	2641.0	3358.0
Chinese[c]					
Population	100.0	26.7	8.8	7.5	57.0
Education	12.4	11.6	14.5	13.3	12.4
Income					
Male	5223.0	4482.0	4428.0	5100.0	5945.0
Female	2686.0	2877.0	2495.0	2153.0	2688.0

TABLE 1--Continued

	United States	Northeast	North Central	South	West
Filipino[c]					
Population	100.0	9.0	8.1	8.7	74.2
Education	12.2	15.5	16.5	12.8	11.4
Income					
Male	5019.0	5740.0	6609.0	4046.0	4955.0
Female	3513.0	4750.0	4873.0	3463.0	3168.0
Spanish Origin[d]					
Population	100.0	...	...	...	...
Education	10.0	...	...	...	...
Income					
Male	5217.0	...	...	...	...
Female	2313.0	...	...	...	...

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Negro Population.

[b]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians.

[c]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Japanese, Chinese, and Filipinos in the United States.

[d]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Persons of Spanish Origin.

The Indian population of North Dakota also experienced substantial growth although at a somewhat lower rate than nationally (See Table 1A). Each of the reservations increased in size with Fort Totten exhibiting the largest relative growth (48 percent) and Standing Rock having the largest expansion in reservation residents (1377 more residents than in 1950).* These developments are reflected in part by the increasing importance of Indians in the state, rising to 2.2 percent of the population in 1970 from 1.7 percent in 1950. The latter is due, of course, to a number of factors besides the growth of the Indian population of which a net outmigration of whites is perhaps the most important.

2. Education

Indians are one of the more poorly educated groups in the country - - a situation which has not changed in over twenty years. In 1970, as in 1950, Indians ranked third among the six major minorities in terms of lowest educational achievement. Indians of the North Central region have slightly more schooling on the average, however, than Indians of other regions. Again there is no difference between the regional rankings of 1950 and 1970. The biggest change occurred in education levels between the regions with the range of regional variation falling from 1.7 to .6 years.[1]

---

*See Table 2A in the Appendix.

[1] In 1950 the Median was 7.3 and 8.1 years for the U.S. and North Central region respectively whereas the corresponding averages in 1970 were 10.1 and 10.4 years. (Persons 14 years old and over). Computed from data in U.S. Department of Commerce, Bureau of the Census, U.S. Census of the Population: 1950, Special Report, Nonwhite Population by Race, P-E No. 38, Table 10, pp. 32-33; U.S. Census of the Population: 1970, Subject Report, American Indians, PC (2)-1F, Table 5, pp. 36-45.

Additionally, the average years of schooling has risen.[2] During this time the educational level of North Dakota Indians also increased but remained below national and regional averages.[3]

3. Income

Economic well being is perhaps reflected most clearly by per capita income. On this basis Indians are the most impoverished group in the nation and have lower incomes in every region except the South. North Central inhabitants, however, fare better than their counterparts in the South and West, which represents a change from 1950 when the lowest income was recorded by Indians of the North Central region. The lot of persons in North Dakota is particularly grim for income is below both regional and national levels.[4] In fact, income for Indians in North Dakota is among the lowest recorded for states with large Indian populations.

Regardless of minority status, the income of women is substantially below the level for men but male income is more variable with the greatest variation occurring in the Northeast and North Central regions. This suggests among other things that women may be a more homogeneous group than men and differ less in education and skill levels. Another noteworthy pattern exists in the relationship between the ranking of men and women of the same minority. In this connection the situation of men and women is similar for they tend to occupy identical positions in their respective

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[2] Ibid.

[3] Ibid.

[4] Ibid.

regional rankings, e.g., Indian men and women have the lowest income of any group by sex in the West and North Central regions.

Summary

Life, then, for many Indians means an impoverished existence more severe than experienced by other minorities. This applies with special force to Indians living in North Dakota. Bleak as the conditions might be, there is room for optimism for signs of reservation improvement are evident.

The next chapter is devoted to a detailed documentation of the status of the North Dakota Indian population. Subsequent chapters present a discussion of recent efforts at and the potential for economic development. Hopefully this will reveal the progress made as well as the distance yet to go.

CHAPTER 2

SOCIAL AND ECONOMIC CHARACTERISTICS OF THE INDIAN POPULATION

A. Age and Sex

The North Dakota Indian population was estimated at 13,565 in 1970 of which 52 percent were females and 48 percent were males (Table 2). The ratio of women to men is greater for Indians than for the general population which is composed almost equally of males and females (49.4 percent and 50.6 percent respectively). Indian females outnumber Indian males in three age groups: 10 years or less; 20 years to 54 years; and 70 years and over. Evidently, female births exceed male births and Indian women outlive their male counterparts. Indian women reaching their fifties and sixties experience a higher death rate than men, but those who survive go on to live longer. The disparity in category 20-54 years may be due to employment relocation programs which attract a higher proportion of men between the ages of 20 and 35 and a higher death rate for men between the ages of 35 and 50.[5]

Approximately 25 percent of the Indian population is comprised of men of working-age (16-69 years old) and 26 percent consists of working-age women. Put another way, the working age population is 51 percent of the total population of which 51 percent are working-age women. The significance of this emerges when compared with state and national figures (62 and 64 percent respectively). To the degree that employment is possible, a smaller proportion

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[5] U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Govt. Printing Office, 1971).

TABLE 2

NORTH DAKOTA INDIAN POPULATION BY AGE AND SEX: 1970

	Females		Males	
	% of Total Females	% of Total Population	% of Total Males	% of Total Population
Age Group				
All ages	100.0	51.6	100.0	48.4
Under 5 years	14.6	7.5	14.9	7.2
5 to 9 years	17.0	8.8	16.0	7.8
10 to 14 years	14.6	7.5	15.7	7.6
15 to 19 years	12.0	6.2	13.0	6.3
20 to 24 years	6.7	3.5	5.8	2.8
25 to 34 years	9.8	5.0	10.2	4.9
35 to 44 years	9.0	4.6	7.8	3.8
45 to 54 years	7.0	3.6	6.3	3.0
55 to 64 years	4.2	2.2	6.4	3.1
65 to 69 years	1.9	1.0	2.2	1.1
70 to 74 years	1.3	.7	.4	.2
75 years or over	1.9	1.0	1.3	.6

Calculated from: U.S. Department of Commerce, Bureau of Census, U.S. Census of Population: 1970 (Washington: U.S. Government Printing Office), Subject Report, American Indians, p. 12.

of the Indian population supports the young, old, and unemployable than is usual, and this burden falls heavily on women.

Another unusual feature of the Indian population is its relative youth. The median age was 16.4 in 1970 whereas the median age for the state and the nation were 26.3 and 27.6 (Table 3). Approximately 46 percent of the Indian population was under 15 years old whereas 30 and 28 percent were the corresponding state and national rates. Again the impact of high birth rate, outmigration of working-age Indians, and above normal death rates for Indians between the ages of 15 and 69 is clearly reflected by the data. In recent years, however, the birth rate has declined (from 47.9 to 44.8 per 1000 population over the period 1959-1967)[6] and the median age has risen slightly from its 1950 level of 16 years. Had not the infant death rate dropped so dramatically - it remains at an intolerable level - the age distribution of the population would deviate less from the non-Indian population than it does presently.

B. Family Characteristics

The economic role of Indian women has already been alluded to but an examination of the status of Indian families yields direct evidence on their social and economic responsibilities. Indian women head a disproportionate number of families when data are compared for Indians, the state, and the nation. Relatively speaking, North Dakota Indian families are twice as likely to have female heads as are families nationally, and three times as likely as other families in the state (Table 4). Separated, divorced, or single women head 12 percent of all Indian families or, alternatively, 56 percent of the Indian families headed by women.

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[6] See Table 4A.

TABLE 3

AGE DISTRIBUTION OF POPULATION IN 1970:
NORTH DAKOTA INDIANS, NORTH DAKOTA, AND UNITED STATES

	(Percent)		
	North Dakota[a] Indians	North Dakota[b]	U.S.[c]
Age Group			
All Ages			
Under 5 years	15.2	8.3	8.4
5 to 9 years	17.0	10.5	9.9
10 to 14 years	15.6	11.4	10.3
15 to 29 years	12.8	10.6	9.4
20 to 24 years	6.5	7.7	7.9
25 to 34 years	7.3	10.6	13.2
35 to 44 years	8.6	10.4	11.4
45 to 54 years	6.9	10.3	11.4
55 to 64 years	5.4	9.5	9.1
65 to 69 years	2.1	3.5	3.4
70 to 74 years	.9	2.8	2.7
75 years & over	1.7	4.4	3.8
Median Age	16.4	26.3	27.6

[a] Calculated from: U.S. Department of Commerce, Bureau of the Census, U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 12.

[b] Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 271.

[c] Calculated from: U.S. Census of the Population: 1970, Vol. I, General Social and Economic Characteristics: U.S. Summary, p. 380.

TABLE 4

FAMILIES BY NUMBER OF OWN CHILDREN UNDER 18 YEARS OLD AND MARITAL STATUS OF HEAD: NORTH DAKOTA INDIANS, NORTH DAKOTA, AND UNITED STATES

	North Dakota[a] Indians	North[b] Dakota	United[c] States
Own children under 18 years:			
No own children under 18 years	28.9	42.4	44.8
1 own child	15.6	16.4	18.1
2 own children	13.8	16.0	17.0
3 or more own children	41.7	25.2	20.1
Marital status and sex of head:			
Male head:	78.5	93.4	89.2
Married	75.1	89.5	86.0
Widowed	1.7	.9	.9
Divorced	.4	.3	.4
Separated	-	.1	.3
Single	1.3	.8	.9
Other	-	.8	.7
Female head:	21.5	6.6	10.8
Separated	3.8	.4	1.8
Other married	1.2	.4	.6
Widowed	8.3	3.8	4.4
Divorced	4.0	1.2	2.6
Single	4.2	.8	1.4

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 117.

[b]Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 320.

[c]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Family Composition, p. 66.

Related national and state figures for the marital status of female family heads are 5.7 and 2.4 percent. The data suggest that the Indian family structure is less stable than is true in general - dissolution of marriages, common-law marriages, and non-marital situations are more common. One can only speculate about the extent to which financial problems promote the break-up of families but given the features of public assistance programs and the lack of adequate job opportunities it is not unreasonable to presume they are an important factor.

Indian families differ more significantly from other families in terms of their size. Although the median number of children is two, there are many large Indian families, e.g., 22 percent have 5 children or more. The size of Indian families by itself puts strong pressure on family heads to seek employment, and one would expect labor force participation to be high if work is available for which they qualify. Further, the burden of supporting large families might be shouldered by all members capable of working outside the home. Alternatively, where work opportunities are scarce, either in terms of availability or accessability, the possibility is raised that home life will be further destabilized.

C. Labor Force Participation

Labor force participation by North Dakota Indians is well below the state and national rates (see Table 5). Entry into the labor force by Indians is lower in only three other states with 10,000 or more Indian population (South Dakota, New Mexico, and Arizona). Within the state, the percent of males and females in the labor force on the Standing Rock and

TABLE 5

EMPLOYMENT STATUS OF PERSONS 16 YEARS OLD AND OVER IN 1970: NORTH DAKOTA INDIANS, NORTH DAKOTA, AND UNITED STATES

	(Percent)					
	North Dakota Indians[a]		North Dakota[b]		United States[c]	
	Male	Female	Male	Female	Male	Female
In Labor Force	53.6	31.8	72.6	35.4	76.6	41.4
In Civilian Labor Force	52.6	31.8	67.4	35.3	73.7	41.3
Unemployed	28.5	12.6	4.6	4.5	3.9	5.2
Not in Labor Force	46.4	68.2	27.4	64.6	23.4	58.6

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 33.

[b]Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 336.

[c]Calculated from: U.S. Census of the Population: 1970, Vol. I, General Social and Economic Characteristics: U.S. Summary, p. 679.

Turtle Mountain Reservations are respectively above and below the rate for the Indian population as a whole.[7] Furthermore, the respective participation rates differ from each other substantially in each sex category. Differences in the age structure of the populations account for part of the disparity between the two reservations (median age of Standing Rock population is 18.7 whereas Turtle Mountain's is 15.9) [8] and also partly explain the difference in participation rates between states. Location is a more important reason, however, for North Dakota's relatively low rank. For example, participation rates of Indian populations in urban-industrial states such as California and New York approach the male and female national rates of 77 and 41 percent.

North Dakota has the highest rate of Indian unemployment, by a wide margin, of any of the states with a large Indian population. Nationally, Indians in Texas fare the best as only 4 percent of the men and 6 percent of the women have been unemployed in recent years.[9] Like participation, employment is influenced by age distribution and geographical location. For example, unemployment rates of Indians are generally lower in urbanized states. The chief reason is, of course, that job opportunities are greater in cities where the industrial base is more diversified. Two major exceptions are Oklahoma and Arizona which have Indian unemployment rates lower than California.

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[7] Based on data in U.S. Department of Commerce, Bureau of the Census, U.S. Census of the Population: 1970, Subject Report, American Indians, PC(2)-1F.

[8] Ibid.

[9] Ibid.

Closer inspection of the data reveals an age group participation pattern for Indians markedly different from that of the state and the nation (Table 6). The first noteworthy feature is that Indian participation is below the state and national rates for every age group. The second concerns the pattern of male and female Indian participation relative to one another and relative to the state and the nation. The pattern for the U.S. consists of increasing rates throughout the 16 to 44 age range; in contrast, Indians start leaving the labor force in their late thirties and early forties (Table 6). There is a significant difference between Indian participation and the state and national rates for persons over 35. Indian men in particular deviate from the pattern demonstrated by males in this age group. Although there are only minor differences between the participation patterns of Indian men and Indian women, Indian women differ noticeably from the pattern for women in general. Specifically, women 20 to 24 years old exhibit the greatest tendency to enter the labor force whereas the highest participation by Indian women occurs between the ages of 35 and 44.

D. Employment Status and Occupational Structure

Not only do Indians in North Dakota enter the labor force on a lesser scale than the general population, those in the labor force also work fewer weeks out of the year. The proportion of Indian family heads who work 50 to 52 weeks a year is substantially below the corresponding state and national rates (Table 7), e.g., the state rate is approximately twice the Indian rate. Apparently the only bright point among these dismal statistics is that relatively more Indians work over 35 hours a week when they do work.

TABLE 6

CIVILIAN LABOR FORCE PARTICIPATION RATES:
N.D INDIAN POPULATION, N.D. NON-INDIAN POPULATION,
AND UNITED STATES FOR 1970

	(Percent by Age Group)					
	N.D. Indians[a]		N.D. Non-Indians[b]		United States[c]	
	Female	Male	Female	Male	Male	Female
Age Group						
16 to 19 years	25.0	27.0	34.2	40.3	43.5	34.8
20 to 24 years	34.4	53.0	53.4	77.5	69.1	55.9
25 to 34 years	36.4	80.8	36.4	93.1	90.3	44.8
35 to 44 years	42.4	72.8	40.0	94.3	92.6	50.2
45 to 64 years	34.3	54.9	40.3	85.3	85.5	47.8
65 years & over	7.9	8.1	10.7	20.1	24.8	10.0

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 33

[b]Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 336.

[c]Calculated from: U.S. Census of the Population: 1970, Vol. I, Characteristics of the Population, Part I, U.S. Summary, p. 672.

TABLE 7

NUMBER OF WEEKS AND HOURS WORKED BY FAMILY HEADS
AND NUMBER OF EARNERS PER FAMILY IN 1969
NORTH DAKOTA INDIANS, NORTH DAKOTA, AND THE UNITED STATES

	North Dakota[a] Indians	North Dakota[b]	United States[c]
Weeks Worked:			
50 to 52 weeks	33.7	66.8	58.7
27 to 49 weeks	16.2	13.6	15.6
26 weeks or less	19.6	8.4	6.0
Did not work in 1969	30.5	11.2	19.7
Hours Worked:			
35 hours and over	85.2		79.3[d]
15 to 34 hours	6.4		12.7
Under 15 hours	2.8		5.0
With a job but not at work	5.6		3.0
Number of Earners per Family:			
No earners	18.9	6.9	9.1[c]
1 earner	38.2	43.2	39.9
2 or more earners	42.9	49.9	51.0

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 117.

[b]Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 504.

[c]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Employment Status and Work Experience, p. 274, p. 224.

[d]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Sources and Structure of Family Income, p. 1.

Nevertheless, the fact is that Indians are usually underemployed as well as frequently unemployed.

The severity of the employment problem for Indians can be appreciated by considering the work experience of family heads in greater detail. A large proportion of Indian family heads (30 percent in 1969) do not work each year, and those who do typically work less than 50 weeks. Hence, employed heads of Indian families are idle more often than the heads of non-Indian families. Relatively speaking, about three times as many Indian families are without a wage earner when compared with other families in the state, and the proportion having more than one earner is significantly below that of the nation. Thus, Indian family heads who have heavy burdens because of the size of their families have a difficult time finding work of sufficient duration to allow them to fulfill their responsibilities satisfactorily. In addition, they receive less assistance from other family members than do the heads of non-Indian families.

Craft, service, and operative occupations are the most frequent forms of work experience (Table 8). Professional, technical, and managerial occupations are also relatively important. In comparison with the occupational experience of non-Indians, the service category is of disproportionate importance. Another notable difference lies in the farm related categories. Since North Dakota's economic advantage lies in the realm of agriculture, one would expect farm occupations to rank higher than they do. It should be noted the Farmers and Farm Managers category substantially outranks all other occupations for the state.

TABLE 8

OCCUPATION OF FAMILY HEADS IN 1969:
NORTH DAKOTA INDIANS, NORTH DAKOTA, AND UNITED STATES

	North Dakota[a] Indians	North Dakota[b]	U.S.[c]
Major Occupation Group			
Professional, Technical, & Kindred	12.5	10.8	14.8
Managers and Administrators, except farm	7.2	14.1	12.3
Sales Workers	.5	5.7	6.9
Clerical and Kindred workers	4.6	5.4	8.6
Operatives, including transport	17.1	9.6	18.9
Laborers, except farm	5.9	3.1	4.7
Farmers and Farm Managers	9.1	26.3	3.0
Farm Laborers and Foremen	4.0	2.3	1.2
Service Workers, except private household	18.2	6.6	7.6
Private Household workers	1.6	.2	.5
Craftsmen, foremen, and kindred workers	19.3	15.9	21.5

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 117.

[b]Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 481.

[c]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Family Composition, p. 138.

Clearly, the work experiences of Indians are concentrated within a few predominant occupations. More importantly, this occupational pattern reflects the importance of industries located on or near reservations in the state. Agriculture has not dominated these industries in recent years, although it once did. Two decades ago 33 percent of all employed Indians were farmers or farm managers and 28 percent were farm laborers or foremen.[10] Despite the vast changes which have taken place in agriculture since 1950, the transformation of the occupational structure of the Indian population cannot be called anything but phenomenal. At the moment the occupational structure indicates the importance of federal agencies such as the Bureau of Indian Affairs and the Public Health Service, government poverty programs,and tribal activities in tourism and recreation.

The foregoing depiction of the demographic and labor force status of the Indian population provides a foundation for understanding Indian dependency on outside financial support. The inability of many to work on a full-time basis coupled with an apparent inability to compete effectively for positions requiring managerial skills culminates in low earned incomes for families and individuals.

E. Income for Persons and Families

The income disparity between Indians and non-Indians is extreme whether considered on a personal or a family basis. In 1969 approximately

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[10]Computations based on data in U.S. Department of Commerce, Bureau of the Census, U.S. Census of the Population: 1950, Special Report, Nonwhite Population by Race, P-E No. 3B.

69 percent of all Indian men had annual incomes less than $4,000, with the median income for the group being $2287 (Table 9). This compares unfavorably with the position of North Dakota men for whom the median income was $4930, and 57 percent of whom had incomes in excess of $4000. Focusing on the income category $10,000 and above for a moment, one discovers that almost 17 percent of the men in the state fell into this group but that only 3 percent of all Indian men had incomes of this magnitude. Comparison of the median income of Indian men with that of other minority groups in the state puts their position into sharper perspective. Negro men and men of Spanish origin, the two other major minorities in North Dakota, are both more favorably situated than Indian men, with the median income of the Spanish origin group over twice as large as the median income of Indian men.[11]

As is the case generally, women do not fare as well as men for 82 percent of the Indian women and 81 percent of all women in the state have incomes below $4000. At the other end of the income range, few women have incomes above $10,000, .7 and 1.4 percent of Indian and non-Indian women respectively. This constitutes an even more extreme deviation from the position of men than the higher concentration of women in the lower income categories. A striking feature of the data is the closeness of the economic status of North Dakota women regardless of their ethnic origin. Another is the relative status of Negro and Indian women as reflected by their median income - Negro women rank first on this basis followed by

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[11]Comparison based on information in U.S. Department of Commerce, Bureau of the Census, U.S. Census of the Population: 1970, Subject Reports, Negro Population; Persons of Spanish Origin; American Indians, PC(2)-1B, 1C, and 1F.

TABLE 9

INCOME IN 1969 OF PERSONS BY SEX:
NORTH DAKOTA INDIANS, NORTH DAKOTA, AND UNITED STATES

	Males		Females	
	N.D. Indians[a]	N. Dak.[b]	N.D. Indians[a]	N. Dak.[b]
Less than $1,000	26.6	13.3	35.9	37.4
$1,000 to $1,999	20.3	11.8	18.8	19.4
$2,000 to $2,999	10.5	9.7	15.9	13.1
$3,000 to $3,999	11.6	8.2	11.6	11.0
$4,000 to $4,999	8.4	7.5	6.4	7.0
$5,000 to $5,999	6.6	8.4	3.8	4.2
$6,000 to $6,999	6.1	7.8	2.7	2.8
$7,000 to $7,999	3.5	6.7	2.1	1.8
$8,000 to $9,999	3.5	9.7	2.1	1.9
$10,000 to $14,999	2.5	10.8	.4	.9
$15,000 or more	.4	6.1	.3	.5
Median Income	$2287	$4930	$1751	$1651
Mean Income	$3108	$6009	$2280	$2367
Total Persons	100.0	100.0	100.0	100.0
with income	82.3	90.3	63.5	59.1
without income	17.7	9.7	36.5	40.9

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 33.

[b]Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 36.

Indian women and women of Spanish origin.[12] Negro and Indian women each have median incomes above the state average and both are substantially better off than women of Spanish origin, who are evidentally the worst off of any group within the state.

A similar situation exists between the income of Indian and non-Indian families. The median income in 1969 for Indian families was $4437 which was substantially lower than the state and national median family incomes of $7836 and $8808 respectively (Table 10). On a per capita basis, members of the respective families have on the average $860, $2100, and $2470 allocable to their needs, the implications of which are obvious. As one would expect, the proportion of Indian families with incomes less than $4000 per year has been several times larger than for the state or the nation. Conversely, the proportion of Indian families with incomes of $15,000 or more has been several times under the corresponding state and national figures.

The data indicate that in 1969 78 percent of all Indian families had wage and salary income, which compared favorably with the 77 percent recorded for North Dakota families in general (Table 11). The average wage and salary income for Indian families has been, however, well below the North Dakota and national averages, running about 68 and 50 percent of each of the latter (Table 12). Similarly earned income of other types has been substantially less for Indian families and, furthermore, not as common as among non-Indians. The low level of earned family income, the limited number of alternative sources of income, and the large size of families - - all result in a need for income supplements in order to maintain life at a level of bare subsistence.

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[12] Ibid.

TABLE 10

FAMILY INCOME OF POPULATION IN 1969:
NORTH DAKOTA INDIANS, NORTH DAKOTA, AND UNITED STATES

	North Dakota[a] Indians	North Dakota[b]	U.S.[c]
All families			
Less than $2,000	18.4	6.5	5.9
$2,000 to $3,999	26.7	12.5	9.3
$4,000 to $5,999	19.0	15.9	10.8
$6,000 to $7,999	12.6	16.5	12.8
$8,000 to $9,999	10.4	14.5	13.9
$10,000 to $14,999	9.5	21.4	26.6
$15,000 to $24,999	3.4	9.8	16.1
$25,000 or more	-	2.9	4.6
Median Income	$4437	$7836	$ 8808
Mean Income	5429	9057	10955
Average No. of Family Members	5.15	3.72	3.56

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 126.

[b]Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 198.

[c]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Family Composition, p. 164.

TABLE 11

TYPE OF INCOME OF FAMILIES IN 1969:
NORTH DAKOTA INDIANS, NORTH DAKOTA, AND UNITED STATES

	North Dakota[a] Indians	North Dakota[b]	U.S.[c]
All families with wage and salary income	78.0	76.7	86.3
with non farm self-employment income	2.8	12.9	10.8
with farm self-employment income	10.4	32.1	4.6
with Social Security income	14.7	21.3	19.7
with public assistance or public welfare income	45.4	3.8	5.3
with other income	25.8	37.8	35.1

[a]Calculated from: U.S. Census of the Population, Vol. II, Subject Report, American Indians, p. 116.

[b]Calculated from: U.S. Census of the Population, Vol. I, Detailed Characteristics: North Dakota, p. 483.

[c]Calculated from: U.S. Census of the Population, Vol. II, Subject Report, Sources and Structure of Family Income, p. 314.

TABLE 12

AVERAGE INCOME BY TYPE FOR FAMILIES IN 1969:
NORTH DAKOTA INDIANS, NORTH DAKOTA, AND UNITED STATES

Type of Income	North Dakota[a] Indians	North Dakota[b]	U.S.[c]
Wage and Salary	$4906	$7483	$10176
Non-farm self-employment	--	$6358	$ 8150
Farm self-employment	$2179	$5034	$ 3522
Social Security	$1145	$1525	$ 1625
Public Assistance or public welfare	$1749	$1387	$ 1284
Other	$1189	$1344	$ 2112

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 116.

[b]Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 483.

[c]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Sources and Structure of Family Income, p. 314.

Consequently, it is not surprising that over 45 percent of all Indian families receive assistance under various public welfare programs, even though this is 11 times the rate for all families in the state with welfare income.

F. Health and Education

Education and health are two factors that weigh heavily on the employability of individuals and on economic well-being. The low educational achievement and poor health of Indians are well known and have been the focus of a number of remedial programs. The government has a long-standing commitment to providing educational and health services to reservation Indians; however, its commitment to upgrading the status of Indians in these respects is relatively recent. Progress has been made as housing, sanitation, and the provision of medical and educational services have improved, in some cases dramatically, from the conditions prevailing 10 to 15 years ago. Nevertheless, the educational attainment and health of Indians remain below acceptable levels.

Of the two, education is the more binding constraint on the income potential of Indians in the state. Nonetheless, the incidence rates of a number of diseases are high relative to national norms. Fortunately, the actual number of cases of severe illness is not large, e.g., about 22 cases of active tuberculosis, 46 of dysentery, and 650 of pneumonia per year.[13] The total number of cases of 14 notifiable diseases is about 3300 on the average, or alternatively one out of every fourth Indian in North Dakota has

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[13] Calculated from information in U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Trends and Services, 1970 Edition.

been striken by illness each year. Most of the diseases are not debilitating enough to prevent persons from seeking work or seriously to diminish time spent at work. On the other hand, a large proportion of the working-age Indian population in North Dakota suffers from insufficient education and vocational training, the effects of which are more enduring and difficult to overcome than those of periodic sickness.

The median number of school years completed by North Dakota Indians was 8.9 in 1970 (Table 13). Only 25 percent were high school graduates and only 9 percent had attended college. In each case, the rates for the general population were twice as large. Since considerable weight is given by employers to the number of school years completed the data suggest that Indians are at a strong disadvantage in competing for jobs off the reservation. Further, the educational status of the working-age population determines the attractiveness of the labor force to firms considering the establishment of operations on or near reservations.

Most Indians in this age group end their formal education after the eighth grade. Women are more likely to continue their education through high school but thereafter proportionately more men enter college. In recent years the percentage of Indians entering high school and college has risen, but the completion rate in each instance remains low.

In brief, Indians have little contact with educational institutions beyond the elementary level. Undoubtedly most of those with primary education are agricultural workers in the older age categories. Young Indians are more likely to continue their education because there are now

TABLE 13

EDUCATIONAL ATTAINMENT OF POPULATION
25 YEARS OLD AND OVER IN 1970:
NORTH DAKOTA INDIANS, NORTH DAKOTA, AND UNITED STATES

	North Dakota[a] Indians	North Dakota[b]	U.S.[c]
Educational Attainment			
Elementary:			
Less than 5 years	14.9	4.1	5.5
5 to 7 years	16.7	8.9	10.0
8 years	21.2	25.7	12.8
High School:			
1 to 3 years	22.1	11.0	19.3
4 years	16.4	27.6	31.1
College:			
1 to 3 years	6.7	14.3	10.7
4 years or more	2.0	8.4	10.6
Percent High School graduates	25.1	50.3	52.4
Median School years	8.9	12.0	12.1

[a]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, American Indians, p. 117.

[b]Calculated from: U.S. Census of the Population: 1970, Vol. I, Detailed Characteristics: North Dakota, p. 298.

[c]Calculated from: U.S. Census of the Population: 1970, Vol. II, Subject Report, Educational Attainment, p. 1.

fewer agricultural jobs to detract them from academic pursuits than was the case for the older generation. Also geographic and cultural isolation were more important in the past in inhibiting a young Indian's desire for an occupation requiring formal training.

Variation in the educational status of the reservation populations is not extreme but there are differences worth noting. The principal distinctions involve the proportion completing high school and the proportion entering college. For example, 28 percent of the Standing Rock population between the ages of 25 and 34 are high school graduates whereas on the Turtle Mountain reservation only 21 percent finish high school.[14] Similarly, relatively more persons from Standing Rock enter college, but the number is not as yet very large. On the Turtle Mountain reservation men exhibit a greater tendency than women to seek college training; however, Standing Rock women have the highest overall college entrance rate. Completion rates for the two reservations are equally unimpressive for neither group included in the 1970 census had a holder of a college degree.

Summary

Having set forth the essential traits of North Dakota's Indian population, the study will turn to examining their interrelationships and identifying major factors affecting the present situation. Of course events pertinent in this regard are numerous and most will be only briefly touched on. Readers interested in a fuller treatment of these events should consult the vast literature existing on the American Indian. Instead the focus will

[14] Computed from data in 1970 Census, American Indians.

be to define the scope and to appraise the success of these efforts in light of the long duration of most reservation problems. A subobjective will be the identification of forces likely to shape the destiny of the Indian people in the forseeable future.

CHAPTER 3

HEALTH, EDUCATION, AND WELFARE: TRENDS AND PROGRAMS

A. Health

The Federal Government undertook the task of providing health services to Indians in 1832 under the provisions of a treaty with a group of Winnebagos. By 1871 approximately 24 treaties called for the provision of health care of one kind or another. Limits of 5 to 20 years were set initially, but for a number of reasons, the most important of which was the extent of disease among Indians, medical services became a permanent feature of the Federal Government's relationship with Indian Tribes.[15]

Under the direction of the Bureau of Indian Affairs (BIA) Indian health programs evolved from the extension of physician's services to the operation of hospitals, the provision of nursing, dental and pharmaceutical services, and the establishment of disease control and sanitation programs. From 1890 BIA policy strived to emphasize preventive care but efforts in this direction were hindered by inadequate funding and the demand for curative medical services. Conditions were deplorable until well into this century.

Since 1955, when the responsibility for the health care of Indians was entrusted to the U.S. Department of Health, Education, and Welfare(HEW), funds appropriated by Congress have increased threefold over the amounts

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[15] See William A. Brophy and Sophie D. Aberle, The Indian: America's Unfinished Business (Norman, Oklahoma: University of Oklahoma Press, 1966), pp. 159-161.

formerly provided to the BIA.[16] Correspondingly, Indian health has improved as more medical personnel and better health facilities have become available. Nonetheless Indian mortality and disease-incidence rates remain abnormally high.

Funds allocated to Indian health programs in North Dakota also experienced substantial growth in nominal terms after 1955. For example, health expenditures per person rose from $43 in 1955 to over $150 by 1971.[17] In addition, funds for the construction of hospitals and sanitation facilities became available in increasing amounts after 1959. On a relative basis, North Dakota Indians obtained 1.9 percent of the total funds in 1955 and 1.7 percent in 1971,[18] which compares favorably with the fact that during this period the North Dakota Indian population dropped from 3.2 to 1.8 percent of the American Indian population.

The Present Situation

Healthwise, North Dakota Indians are better off than Indians living in a number of other states. In terms of mortality, Indians in 50 percent of the states with significant Indian populations have death rates above the North Dakota rate. This applies to individuals of all ages as well as for infants under a year old. Deaths attributable to eight leading causes of

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[16] U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Highlights (Washington, D.C.: Government Printing Office, 1966), p. 43.

[17] Computations for 1955 and 1971 based on information provided in respectively U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Highlights (Washington, D.C.: Government Printing Office, 1966), pp. 43-44; Executive Office of the President, Office of Economic Opportunity, Federal Outlays in North Dakota, Fiscal Year 1971), (Washington, D.C.: National Technical Information Service, 1972).

[18] Ibid.

death were lower than the Indian national average in three categories (accidents and respiratory and intestinal ailments) and, correspondingly, higher in five.[19] The mortality rates for the United States (all races) are lower than the Indian rates in all categories (Table 14). In this connection, the mortality rate for persons 20-44 years of age has special significance. On the average 6.4 percent of the working-age Indian population in North Dakota dies each year, which is over 3 times the U.S. rate. Hence, the North Dakota Indian population looses a disproportionate number of persons during their most productive years.

The impact of better medical care in the Aberdeen Area is reflected by differences in the distribution of deaths by age in Table 15. The greatest advances in health have occurred among the young and old. The latter is also evident in the data depicting the increasing importance of diseases having high incidence among older people, e.g., heart disease and malignant neoplasms (Table 3A in Appendix). The fall in the deaths of children under one year as a proportion of all Indian deaths is clearly related to the drop in infant death rates during the last 20 years. For example, the rate for Indian infants in the Aberdeen Area decreased by 36 percent between 1958 and 1968 alone.

Incidence of Disease

Caution must be exercised when comparing disease incidence rates for Indians and the general population. In some cases comparison is precluded

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[19] U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Government Printing Office, 1971), p. 53.

TABLE 14

DEATH RATE PER 1000 POPULATION BY AGE:
NORTH DAKOTA INDIANS 1965-1967 AND UNITED STATES 1966

	North Dakota Indians	U.S.
Under 5	8.8	5.1
5 - 19	1.5	.6
20 - 44	6.4	2.1
45 - 64	17.2	11.6
65 and over	70.7	61.7

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Government Printing Office, 1971), p. 53.

TABLE 15

PERCENT OF DEATHS BY AGE GROUP:
INDIANS IN ABERDEEN RESERVATION AREA, 1954-1956 AND 1965-1967
AND UNITED STATES, ALL RACES, CALENDAR YEAR 1955 AND 1966

	Aberdeen		United States	
	1954-1956	1965-1967	1955	1966
All Ages (No.)	(2,505)	(2,728)	(1,528,717)	(1.863,149)
Percent	100.0	100.0	100.0	100.0
Under 1	22.0	13.9	7.0	4.6
1 - 4	5.6	3.3	1.1	.8
5 - 14	2.5	1.9	1.0	.9
15 - 24	5.5	7.2	1.6	1.9
25 - 44	14.6	15.6	6.9	5.9
45 - 64	17.9	23.0	25.8	24.6
65 and over	31.6	35.0	56.6	61.2
Unknown	.3	.1	.1	-

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Government Printing Office, 1971), pp. 46-47.

because data for the general population are unavailable although records have been kept on the number of Indian cases. This is true especially for diseases which are major health problems among Indians, such as pneumonia, influenza, and trachoma, but of minor importance nationally. Finally, differences in incidence rates involving comparable data are often due to more complete reporting by the Indian Health Service than what is achieved for the country as a whole.

In general, incidence rates for Indians are higher than for the U.S. population, ranging from about 4 times as high for venereal disease to nearly 57 times as high for dysentery (Table 16). The tuberculosis rate for Indians of all areas except Alaska is about 7 times as high as the overall U.S. rate in spite of the fact that the tuberculosis rate has declined substantially since 1955. Substantial progress has also been made against measles since the initiation of the immunization program in 1963, but incidence among Indians is still 8 times as high as for the nation.

Table 16 reveals that Indians in the Aberdeen Area have relatively high rates of incidence for 7 of the 14 most frequently reported diseases, and normal or below normal rates for the other 7. Compared with rates for the U.S., Aberdeen Area rates are all well above the national norms. However, incidence rates for Indians of the Billings and Navaho service areas exceed, in several cases considerably, the corresponding Aberdeen Area rates in a number of disease categories.[20]

Before leaving the topic of health, the possible economic ramifications of health improvement need to be assessed. Aside from greater physical well-being, a higher level of material prosperity is not an immediate effect

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[20] Indian Health Trends and Services, (1974 Edition), p. 51.

TABLE 16

INCIDENCE RATES FOR LEADING NOTIFIABLE DISEASES IN 1971,
INDIAN ALL AREAS EXCEPT ALASKA,
ABERDEEN AREA INDIAN POPULATION, AND U.S. ALL RACES
(Rates Per 100,000)

Disease	Indian All Areas Except Alaska	Aberdeen Area	U.S. All Races
Otitis Media	11,066.8	12,894.9	...[a]
Gastroenteritis	6,769.0	6,147.3	...
Strep Throat, etc.	6,854.7	8,133.5	...
Pneumonia[b]	3,201.5	3,240.6	...
Influenza	3,717.2	3,356.5	...
Gonorrhea	1,539.7	2,417.0	325.1
Trachoma	694.3	36.3	...
Chickenpox	522.8	603.8	...
Mumps	308.2	534.6	60.6
Dysentery[c]	459.7	117.7	7.8
Hepatitis	400.0	536.4	33.5
Syphilis	198.5	98.6	46.6
Tuberculosis[d]	152.0	138.4	17.0
Measles (Rubeola)	181.8	114.5	36.5

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Government Printing Office, 1974), Table 5.5, p. 51.

[a] Data are not available.

[b] Excludes newborn.

[c] Amebic and bacillary.

[d] New and active.

of health improvement. Indeed the opposite could occur in situations where illness and death among infants is sharply reduced. In the event the birth rate is high or accelerates, as in the case of North Dakota Indians, the result may be a fall in the material well-being of individuals. Income can be maintained through welfare programs or increased effort on the part of employed family heads. The latter requires, of course, that adequate opportunities exist whereby persons can increase their income by working longer hours or experience wage increases resulting from higher productivity. The economies of reservation areas, however, do not provide many such opportunities. Moreover, inadequate education usually limits the employability of the working-age population. Thus, the matter translates into one of maintaining income or at least minimizing personal welfare losses due to sharing income with more family members. Nor is this all. Should the health of working-age individuals improve substantially so that a higher proportion enter the local labor force, the local wage rates for different occupations will tend to fall unless there is a corresponding expansion in the demand for labor. Hence the income of individuals may actually be reduced or, minimally, remain unchanged as a result of investment in health.

B. Education

Federal involvement in Indian education also began with the earliest treaties and consequently has a long history dating back to the early 19th Century. Policy was well established by the time treaties were made with the tribes whose successors presently reside in North Dakota. Until forty

years ago most Indian children in North Dakota, as in other states, were educated in boarding schools operated by the BIA. This reflected to a large degree a policy of "Americanization" which meant, among other things, the separation of Indian children from their parents in the hope that they would more readily identify with mainstream values and aspirations.

The boarding school arrangement proved in many cases to be short of optimal, but the full magnitude of the deficiencies were not fully realized nor widely known until 1928. In that year the Meriam report revealed vast inadequacies in the BIA education programs in the process of compiling a damning record of general social and economic maladjustment. Boarding schools were found to be insufficiently funded, poorly operated, and detrimental to the development of family life. Further, graduates were not aided in finding work, and, consequently, many were compelled to remain in a culture from which they were estranged. In essence the system destroyed an Indian's identity without giving him a viable alternative.

The effects of the Meriam disclosures were far-reaching. Conditions began to improve as boarding schools were more amply funded and Congress authorized the contracting for Indian education with local public school districts (Johnson-O'Malley Act, 1934). Official BIA policy became one of placing as many Indian children as possible in public schools while simultaneously upgrading the quality of instruction and living conditions of its boarding schools. During the intervening years the proportion of children enrolled in public schools in their own communities has grown, meaning most importantly that more children are now able to develop within a familiar environment. Still a significant proportion (19 percent in 1969) continue

to be educated away from home.[21]

A high proportion of Indian children in North Dakota (over 40 percent in 1968) are enrolled in federal schools located on or near their home reservation (Table 17). This is clearly above the national average of 27 percent. Furthermore, mission schools play a large role in the state, enrolling about 13 percent of the students locally as opposed to 9 percent nationally. Apparently promotion of public school attendance has been more gradual in North Dakota than elsewhere, for the percent of North Dakota Indians attending federal or mission schools is slightly above the national rate of 1930.

Federal outlays per pupil in BIA operated schools are typically greater than the funds spent by states for students in public schools. For example, expenditures per student in federal Indian schools averaged about $860 in 1968.[22] Currently, the federal government is spending over $3 million a year on Indian schools in the state, yet the quality of education is generally acknowledged not to be superior to that of other schools.

Historically, federal Indian schools have had a high rate of teacher turnover. For example, teacher turnover in BIA schools was 27 percent during the period 1964-67,[23] which was about twice the national rate for public school teachers.

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[21] Alan L. Sorkin, American Indians and Federal Aid (Washington, D.C.: The Brookings Institution, 1971), p. 22.

[22] Ibid., p. 28.

[23] Ibid., p. 196.

TABLE 17

SCHOOL CENSUS REPORT OF INDIAN CHILDREN,[1]
1967-1968

	Fort Berthold	Fort Totten	Standing Rock	Turtle Mountain
Enrolled				
Public Schools	788	166	840	1,563
Federal Schools	620	256	773	1,668
Mission and other Schools	107	171	97	589
Total, all Schools	1,515	593	1,710	3,820
Not Enrolled	57	122	9	950

Source: U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data (Aberdeen, South Dakota: Aberdeen Area Office, 1969).

[1]Includes all persons 6 to 18 years old in and out of school and all students over 18 in school.

The rate for BIA schools in North and South Dakota has tended to be lower than the BIA average but substantially above the national norm.[24] Consequently, the classroom situation in general has been less stable than desired with many students not having the same teacher for the full academic year. The exceptionally high turnover rates are interpreted as reflecting teacher dissatisfaction caused by either the schools, the students, geographic location, or some combination of the three.[25] The literature, however, blames much of the turnover problem on rigidities in the civil service system.[26]

Indian students do not perform as well as students in general at the secondary and college levels , though they do about as well in the early elementary grades.[27] The poor academic performance of Indians has been subjected to fairly extensive investigation, mainly by educators and psychologists. Generally speaking, the phenomenon is attributed primarily to psychosocial factors such as the degree of adherence to Indian values, the educational attainment of parents, and cultural alienation. Thus far economic factors have not been found to be significantly related to academic achievement.

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[24] Ibid.

[25] Ibid., pp. 46-47.

[26] Ibid., p. 48.

[27] Everett D. Edington points out that practically all major studies of Indian student performance have found the Indian student to be substantially behind other students in achievement, and that the difference in achievement widens by grade levels, see, "Academic Achievement of American Indian Students--Review of Recent Research" (Paper presented at Rural Sociological Society Meeting, San Francisco, California, August 28, 1969), p. 12.

Several studies conclude, however, that completion rates are directly related to the level of family income, and the educational background and work experience of Indian parents.[28] Obviously, for a given generation, education is instrumental in determining the kind and, in some instances, the extent of work individuals are able to obtain. It is the condition of wealth or poverty as perceived by the young that is at issue here, for this perception affects their attitudes toward society and shapes their aspirations in life. This translates directly into notions about the degree of preparation necessary for carrying out the role they expect to assume as adults. A young person who lives in poverty may be reasonably assumed to be less receptive to the idea of 12 or 16 years of schooling than an individual who has shared personally in the benefits of education. Even in the event parents urge their children to prepare for a life different than theirs, resistence is likely to be strong for older children may view such a course as leading to a cultural chasm between them and their parents. Hence in settings where family attachment is cherished by all members concerned, education may not be highly esteemed, especially education that emphasizes roles in a culture with which one does not strongly identify.

The degree of identification with Indian values, as reflected by the language commonly used and the percentage of Indian blood, is strongly related to student achievement after the eighth grade.[29] Interestingly,

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[28]Sorkin, American Indians and Federal Aid, p. 31.

[29]Bernard Spilka and John F. Bryde, "Alienation and Achievement Among Oglala Sioux Secondary Students" (1966; processed) and Kenneth E. Anderson, E. Gordon Collister, and Carl E. Ladd, The Educational Achievement of Indian Children, U.S. Bureau of Indian Affairs (1953), pp. 47, 60 cited in Sorkin, American Indians and Federal Aid, p. 23.

economic factors are not significant again. Perhaps this is due to the strong connection between economic and cultural variables with the effect of economic factors being attributed to closely related cultural variables. In contrast, cultural factors are not as important with regard to the continuance of education as they are in affecting an individual's academic performance. Finally, the educational attainment of Indian parents is extremely important, especially the level of schooling of fathers.[30]

The foregoing identifies factors which affect student achievement either by determining the degree of learning that can occur or the degree of achievement an individual may seek. The motivational aspects are the more interesting of the two. The evidence suggests Indians may be satisfied with less knowledge than they are capable of acquiring regardless of their economic status. This tendency appears to be more pronounced, however, among children of low-income families subscribing to Indian values. The process can be viewed as obtaining a degree with minimal effort, for, as is true in general, Indians perceive that the benefits of education often depend more on the degree obtained than on the depth of understanding achieved. Furthermore psychic reward may be extremely important. For example, a high degree of satisfaction may be derived from the acceptance of an individual as a peer by his parents once he equals their educational attainment. In this context the number of years of schooling become very important and could be a reason behind disparate completion rates between Indian students coming from different economic backgrounds.

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[30] Ibid., p. 31.

Specifically, students from low-income families match the academic achievement of their parents at an early age and consequently are under less compulsion to invest as many years in formal schooling as children of wealthier families.

In the absence of studies on the subject, analysis of Indian student performance in North Dakota is somewhat speculative and one must conjecture about such things as scholastic achievement. Nonetheless, an extrapolation of the results of studies dealing with Indian students in other states is not wholly inappropriate. On this basis, one can surmise that the educational attainment among reservation students is roughly comparable.

Fortunately, more can be said about completion rates. Data on student status in BIA schools reveal that completion rates vary from 96 percent for Fort Berthold to 83 percent for Standing Rock (Table 18). The difference is even more extreme at the secondary level and corresponds to behavior exhibited elsewhere. High school dropout rates are lowest for Fort Berthold, which has high labor-force participation and a low proportion of families in the bottom income group relative to the other reservations. Turtle Mountain and Standing Rock students leave school at about the same rate, 4.6 and 4.1 percent respectively in 1968, as one would expect on the basis of the economic similarity of the reservation populations. Also in this connection it should be noted that the greatest attrition occurs where the unemployment rate is the highest - Turtle Mountain where 65 percent of the labor force was unemployed in 1970.[31]

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[31] U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data (Aberdeen, So. Dak.: Aberdeen Area Office, 1970), p. 11.

TABLE 18

TOTAL ENROLLMENTS AND TOTAL COMPLETIONS
BY RESERVATION, 1967-1968

	Total Enrolled	Total Completions	Total Drop Outs
Fort Berthold			
All grades	463	445	3
K - 8	364	349	-
9 - 12	99	96	
Fort Totten			
All grades	224	203	1
K - 8	224	203	-
Standing Rock			
All grades	670	556	19
K - 8	478	454	-
9 - 12	192	102	-
Turtle Mountain			
All grades	1,482	1,293	56
K - 8	1,191	1,050	-
9 - 12	291	243	-

Source: U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data (Aberdeen, South Dakota: Aberdeen Area Office, 1968).

Compared with the state, the completion rates for the reservation are all lower. Within this, dropout rates vary in accordance with the degree of job opportunities and the work experience of reservation residents.

Thus the circle is complete. Indians have difficulty finding work because they are poorly educated and the frustration and poverty of working-age Indians acts as a disincentive for the young compelling many to terminate their education after the eighth grade. The situation is well known but still only imperfectly understood. Programs are underway, however, which appear capable of improving the status of Indian education. At this juncture, the most significant advances have occured among high school graduates with proportionately more deciding on careers requiring college training. Similar results have yet to occur at the junior high school level.

Education programs are necessary components of any effort to overcome poverty but may be insufficient by themselves. Increased job opportunities on or near reservations are of equal if not of greater importance. Economic development could make the young more eager to continue their education and induce greater effort at mastering academic subjects. At any rate, the conditions of poverty and the mentality it breeds cannot be altered without economic development which itself requires an educated and imaginative populace, especially in a technologically complex era such as the present.

C. Welfare Assistance

Unable to earn an income sufficient to meet their needs, many Indians depend on welfare payments to provide much, in some cases all, of their means of existence. Indians receive income-support from basically two sources: the BIA and state social service agencies. In North Dakota, as is true generally, state public assistance programs provide most of the support. In order to qualify for state programs, Indians must meet the same eligibility requirements as other citizens. Whenever these criteria are satisfied Indians utilize state programs, otherwise help must be sought through the General Assistance program of the BIA.

North Dakota social service agencies assist Indians who qualify under four programs collectively labeled Public Assistance (PA): Old Age Assistance (OAA); Aid to the Blind (AB); Aid to the Permanently and Totally Disabled (APTD); and Aid to Families with Dependent Children (AFDC). In addition those who qualify for Public Assistance (PA) are automatically eligible for Food Stamps and, in some instances, for Medical Assistance (Title XIX). Finally, Indian children placed in foster homes are supported by county, state, and federal funds administered by state agencies.

Each year a sizable proportion of Indians residing in the state receive all or part of their income in the form of assistance payments. For example, in 1969 slightly more than 34 percent received security assistance under either state or BIA welfare programs.[32] Of this amount, PA accounted for 30 percent within which AFDC was the largest program, as one would expect, itself accounting for 57 percent of the people served.[33] Overall, state

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[32] Public Welfare Board of North Dakota, Division of Research and Statistics, North Dakota Welfare Statistics, Calendar Year Review, 1969. (Bismarck, North Dakota, 1970), pp. 14-17.

[33] Ibid.

security assistance programs covered 80 percent of Indian welfare cases with BIA General Assistance handling the remainder.[34]

Increasing numbers of Indians are applying and qualifying for welfare assistance. A good indicator of this development is the behavior of AFDC cases during recent years. Over the seven year period 1965 to 1972 AFDC payments to Indians almost tripled as the number of recipient families doubled (Table 19). Nevertheless, Indian AFDC recipients and payments comprised the same percentage of total AFDC operations in 1972 as they did seven years earlier. Paralleling the expansion of services to Indians, the level of support provided to non-Indian recipients increased at a rate sufficient to preserve the distribution of funds between the two groups.

Further examination of the data for North Dakota puts the matter into perspective. First, 50 percent of the Indian population is below the poverty level but only 28 percent is receiving some form of security assistance.[35] Second, in the seven counties where the majority of the Indians in the state reside approximately 27 percent of the inhabitants are below the poverty level of which 38 percent are Indians. Concerning coverage by PA, 57 percent of the Indian poor are covered, which is four times the non-Indian rate. Alternatively, Indians outnumber other PA recipients by over 2 to 1 in these counties. This is remarkable in view of the fact that only 20 percent of the residents are Indians.

A discouraging aspect of the foregoing is the large proportion of people below the poverty level who are not receiving income assistance (the

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[34] Ibid.

[35] Computations in this paragraph are based on Table 6A found in the Appendix

TABLE 19

A.F.D.C. MAINTENANCE PAYMENTS TO FAMILIES AND PERSONS:
NORTH DAKOTA INDIAN POPULATION AND NORTH DAKOTA, 1965 AND 1972

	Indian Population		North Dakota	
	1965[a]	1972[b]	1965[a]	1972[b]
Average Number:				
Families	425	866	2,039	4,047
Adults	367	683	...	3,685
Children	1,453	2,445	...	10,116
Average Monthly Payment	$ 164.	$ 215.	$ 152.	$ 200.
Total Annual Payments	$837,665.	$2,234,507.	$3,707,271.	$9,721,253.

[a]Calculated from: North Dakota Welfare Statistics: Calendar Year Review 1965, Public Welfare Board of North Dakota, Division of Research and Statistics, Bismarck, North Dakota, Table 13 and Table 32, pp. 13-14, 34.

[b]Calculated from: North Dakota Department of Social Services, Statistics Calendar Year Review 1972, Social Service Board of North Dakota, Bismarck, North Dakota, Table 29 and Table 32, pp. 35-36, 43.

disparity is particularly large for non-Indians). The main reason is, of course, that eligibility requirements (especially with respect to AFDC) exclude many of the poor. This explains only part of the matter, however. Lack of knowledge and the social stigma attached to welfare programs are also important. Often eligible persons do not apply simply because they are unsure of their status and do not wish to subject themselves to a long certification procedure which they view as being personally embarrassing. Shabby treatment accorded to known welfare recipients inhibits many from seeking public help. The situation is changing and both of these factors were probably more important a few years ago than now. In particular, information about available programs is being more widely disseminated among the poor and the delivery of public assistance has improved. Put simply, more eligible people are seeking the assistance they need thereby increasing welfare roles.

Given the well known shortcomings of the major income support programs, it is worthwhile to examine briefly what effect a guaranteed-income plan would have on reservation Indians in North Dakota. Concerning the distribution of family income, enactment of a plan which would have a cut-off line of $4000 would improve the income positions of 45 percent of all Indian families. By way of contrast, 19 percent of all families in the state would be so effected. The advantages of guaranteed-income support are numerous, among which the provisions of an incentive to work and more complete coverage of the poor are the most important. Higher incomes would also promote family stability by allowing families to improve their housing and to meet their nutritional needs more adequately. Moreover, interference with family decisions and

personal embarrassment would be minimized, obviously a matter of some importance. In effect, many of the most undesirable features of existing assistance programs would be eliminated.

Besides basic income maintenance, low-income Indians are eligible for Food Stamps and surplus commodities distributed by the Department of Agriculture. Under the Surplus Commodities program Indians receive staples, such as sugar, salt, butter, and flour, which supply part of their nutritional requirements but are usually inadequate to provide a balanced diet. A chief purpose of Food Stamps is to allow low-income families to meet their nutritional needs more fully. There is evidence, however, that these programs are not functioning as planned in North Dakota.

A recent study [36] found tremendous variation in the utilization of Food Stamps at the county level. Three counties(Cass, Cavalier, and Rolette) have declined to participate in the Food Stamp Program and offer only surplus commodities.Utilization rates for counties offering Food Stamps range from 1.6 (Bottineau and Divide) to 10.1 (Cavalier) percent of the population.[37] In each county the proportion of the population using Food Stamps is significantly below the poverty rate. Furthermore the proportion of Public Assistance recipients, persons who automatically qualify, using Food Stamps is unusually low.

Since Indians are a large proportion of PA recipients in the counties in which they reside, the foregoing implies that most low-income Indian families do not use Food Stamps. In the case of Rolette county they

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[36] Dorette Dusterhoft, Utilization of Food Stamp Programs as Part of Assistance Programs Offered by County Social Service Centers in North Dakota (Grand Forks, N.D.: Bureau of Governmental Affairs, University of North Dakota, February 1973).

[37] Ibid., pp. 30-32.

do not even have the choice. In Sioux county where 88 percent of the people using PA are Indians only 6 percent of those receiving PA use Food Stamps.[38] Of the counties having significant Indian populations, Mountrail has the highest Food Stamp utilization rate, 35 percent in 1970.[39] Food Stamps, thus, are not highly popular with high cost, a long application procedure, and high visibility during use being given most frequently as reasons restricting their use.[40]

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[38] Ibid.

[39] Ibid.

[40] Ibid., p. 35.

CHAPTER 4

MANPOWER AND COMMUNITY DEVELOPMENTS

A. Introduction

Since the transfer of education to HEW, the main concern of the BIA, aside from its land management responsibilities, has consisted of reducing unemployment. The bulk of the Bureau's effort in this area has involved training and job placement carried out under the provisions of programs developed during the 1950's. The BIA also helps to create employment by supplying funds to finance business and agricultural expansion. Similarly, housing improvements funded by the BIA result in work for many reservation residents.

During the 1960's other governmental agencies became involved with reservation development as new manpower programs were added to those of the BIA and, more significantly, community development programs were initiated. In the manpower realm, the programs of the Office of Economic Opportunity (OEO), the Department of Labor (DOL), and the Department of Health, Education and Welfare (HEW) became prominent. Concurrently, OEO and the Economic Development Administration (EDA), initially the Area Redevelopment Administration (ARA), led the way in the field of community development.

B. The Role of OEO

OEO focused on human resource development on the premise that the community and its leaders must be prepared for the task of economic development before the endeavor is actually attempted. The power of this philosophy is

reflected by the development plans prepared after 1964. The plans of each reservation emphasize housing, education, and vocational training and give secondary importance to industrial, commercial, and recreational projects.

OEO's vehicle for achieving leadership and manpower goals was the Community Action Program (CAP). As a means of coordinating the CAP as it applied to Indian reservations, the OEO established a special Indian Branch within the Office of Special Field Programs. Under this arrangement Indian Community Action Agencies (ICAA's) had direct access to the Washington Office and were not required to submit proposals through state and regional offices. This gave the Indian Community Action Program (ICAP) a separate identity and minimized the potential for conflicts with state governments.

OEO's operations in North Dakota were concentrated in 8 counties (Benson, Cass, McKenzie, McLean, Mercer, Mountrail, Rolette, and Sioux) as only Indian reservations and Cass County initiated Community Action Agencies (CAA). Funding was never overly generous (e.g., North Dakota ranked 47th in terms of funds received from OEO in FY 1971)[41] with 1967 the peak year and obligations falling almost 50 percent by 1971. This reflects mainly the phasing out of Job Corps and the transfer of Headstart to DOL and Upward Bound to HEW. Contrariwise to the dispersal of funds nationally, OEO emphasized local initiative as reflected by the funding of reservation CAP's (Table 20).

Monies channeled into ICAA's were used mainly for three purposes: the staffing of CAAs, home improvement, and educational development. One of the most discernible effects of OEO programs was the creation of jobs. OEO funds

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41 Office of Economic Opportunity, Federal Outlays in North Dakota (Washington, D.C.: Govt. Printing Office, 1971).

TABLE 20

OEO OUTLAYS BY RESERVATION AREAS AND STATE,
FISCAL YEARS 1967, 1969, AND 1971*

	Reservation Areas			State		
	1967	1969	1971	1967	1969	1971
ram	$1,778,290	$ 748,315	$1,514,021	$2,513,219	$ 956,962	$1,765,025
onal Emphasis						
Corps[1]	-	-	-	1,421,899	221,442	-
d Start[2]	92,611	654,506	-	424,270	998,350	-
ta	55,095	17,577	40,768	82,642	17,577	40,768
ard Bound	-	-	-	-	177,353	-
ghborhood Health ters	-	-	-	-	-	131,840
	$2,035,126	$1,420,397	$1,554,789	$4,917,080	$2,371,684	$1,937,633

Source: Office of Economic Opportunity, Federal Outlays in North Dakota (Washington, D.C.: Government Printing Office)

[1]Discontinued Fiscal Year 1970.

[2]Transferred to Department of Labor, Fiscal Year 1970.

*Excludes legal services.

were used to hire staff personnel for the ICAAs and in some cases a sizable number of reservation residents were hired. For example, there were on the average about 50 CAP employees on the Turtle Mountain reservation alone during the late 1960's.[42] In addition to administrative positions, educational programs such as Headstart provided employment for persons qualified to work as counselors, teachers, or teacher aides. However, the total number of jobs directly related to CAP funding probably did not exceed 300 per year and most likely averaged somewhat less.

Another tangible result lies in the area of housing. OEO's Home Improvement Program emphasized a "sweat equity" approach whereby individuals were instructed in construction skills and paid as they built or repaired their own homes. OEO housing grants were combined typically with funds from the BIA, the Housing Assistance Administration (HAA), and other governmental agencies. In these joint ventures construction materials, sewage and water facilities were covered by funds from cooperating agencies and OEO handled the cost of training.

Table 21 indicates the level of housing activity which has taken place on North Dakota Reservations since 1964. Most of the figures represent new units, with renovated units a significant portion only in the case of HIP. The pace of construction has increased perceptibly since 1970 and shows evidence of maintaining this level over the next few years. For instance, additional construction proposed for the Turtle Mountain and Standing Rock reservations stands at 390 and 165 units respectively. The data, then, indicate significant advances are being made against the housing problem, at least in terms of the number of new units available.

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[42] Cal Olson, "Aid Programs Aim at Indian Motivation," Fargo Forum, Jan. 18, 1966, p. 6.

TABLE 21

HOUSING UNITS BY HOME IMPROVEMENT PROGRAMS AND MAJOR FUNDING AGENCY BY RESERVATION, 1964-1969 AND 1970-1973

	1964-1969	1970-1973	Total	Funding Agency
Fort Berthold				
Low-Rent	60	150	210	HAA
Mutual Help	30	20	50	HAA
HIP	45	211	256	BIA
Other	-	3	3	FHA
			519	
Fort Totten				
Low-Rent	60	60	120	HAA
Mutual Help	-	-	-	-
HIP	70	75	145	BIA
Other	-	-	-	
			265	
Standing Rock				
Low-Rent	100	120	220	HAA
Mutual Help	-	-	-	-
HIP	100	300	400	BIA
Other	-	100	100	FHA
			720	
Turtle Mountain				
Low-Rent	140	100	240	HAA
Mutual Help	40	-	40	HAA
HIP	47	454	501	BIA
Other	-	72	72	FHA
			853	

Compiled from: U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data (Aberdeen, South Dakota: Aberdeen Area Office, various years).

Several factors account for the relative popularity of BIA's housing program and the low-rent program. HIP provides improved quarters free of charge to those whose housing needs are the greatest, namely large families and the elderly. Undoubtedly, this is a major reason for the dominance of this program. The units financed by HAA are generally of high quality and correspond to Indian preferences for separate dwellings. Moreover, both of these programs are inherently more appealing than the self-help approach from the standpoint of not requiring participants to help construct the dwellings they eventually occupy. Rent, although low by general standards, could be a serious burden for some living in low-rent housing. Probably the most objectionable aspect of low-rent housing is that inhabitants cannot buy the dwellings in which they live. As a matter of interest, this feature has caused dissatisfaction on some reservations.[43] Finally, the status of mutual-help housing signifies the unimportance of OEO housing funds, since this program is the natural complement of OEO's trainee oriented housing program.

Turning to national emphasis funds, Head Start is the largest program followed by Vista and Neighborhood Health Centers. In North Dakota, as on reservations elsewhere, Head Start is highly popular for all ICAA's participated in the program. Indian participation was not large initially, about 20 percent of all state enrollees in 1967, but grew rapidly. Funds have expanded steadily but due to rising costs the number of children enrolled has stabilized. Simultaneously, the number of Indian children under five has increased. Under these circumstances the penetration of Head Start (proportion of eligible children enrolled) has fallen since 1969. This is reflected in Table 22 which

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[43] See Alan Sorkin, American Indians and Federal Aid, p. 174.

TABLE 22

NUMBER OF FULL TIME HEAD START ENROLLEES FOR INDIAN RESERVATIONS IN NORTH DAKOTA, 1969-1971

	1969	1971
Head Start Enrollees	428	453
Indian Children under 5[b]	1653	2943
Total Outlays in Reservation Counties[c]	$654,000	$744,000

[a] Estimated from national cost/child figures found in OEO's Annual Report and total outlays in Reservation counties.

[b] U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data (Aberdeen Area Office).

[c] Office of Economic Opportunity, Federal Outlays in North Dakota (Washington, D.C.: Government Printing Office).

shows a 10.5 percent drop in penetration from 1969 to 1971.

The high cost of Head Start (more than twice the amount annually spent per pupil in the primary grades) is an easy mark for detractors to focus on. Much of the criticism stems from the mistaken notion that Head Start is a substitute for kindergarten or a glorified nursery school. In fact, Head Start has broader objectives than those usually identified for either kindergarten or nursery school. Besides attempting to socialize children (nursery school function) and widen their preschool experience (kindergarten function), Head Start strives to promote the educational development and health of preschoolers. The emphasis is on preparing disadvantaged children for school. An associated objective has been to involve parents in the process, and in this way it fit in closely with the overall objectives of OEO's Community Action Program. In fact, the catalyst for local initiative and political action has been in many instances the local Head Start program.

Because of its controversial nature, Head Start has been subjected to extensive investigation. The evidence concerning Head Start's effectiveness is inconclusive despite the volume of research. For example, studies dealing with cognitive achievement have concluded (1) significant effects are felt only among the most disadvantaged,[44] (2) the performance of other Head Start participants is not appreciably different from that of non-participating children,[45] and (3) positive effects on achievement, when they do occur, vanish

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[44] James S. Coleman et al., Office of Education, U.S. Department of Health, Education, and Welfare, Equality in Educational Opportunity (Washington, D.C.: Government Printing Office, 1966), pp. 491-522, cited by Sar A. Levitan, The Great Society's Poor Law: A New Approach to Poverty (Baltimore: The Johns Hopkins Press, 1969), p. 159.

[45] Ibid.

after completing the program.[46] In another study participation in Head Start was found to increase IQs of children by as much as 10 points.[47] However, research focusing on motivation and responsiveness indicates that Head Start children gain self confidence, develop new interests, and, in general, are more educationally motivated than their peers, even after a lapse of several months.[48]

The most pertinent items with respect to assessing the merits of Head Start for Indian children are the above-average benefits gained by enrollees from very low-income families and the positive effects on motivation. Given the extreme poverty of many Indian families it is not unreasonable to presume that Indian enrollees experience a significant improvement in mental skills. The potential impact on motivation is of even greater importance. The need for generating an interest on the part of Indian students to continue their education is reflected by their dropout rates which are particularly high toward the end of primary school. On this basis, one could argue that a Head Start program should be instituted during elementary school. Of course, OEO had such a program - Follow Through - but it was never adequately funded by Congress.

Other national programs usually operated in conjunction with CAA's (namely Neighborhood Health Centers, legal services, and Upward Bound) were

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[46]Max Wolff and Annie Stein, "Six Months Later: A Comparison of Children Who Had Head Start, Summer 1965, with Their Classmates in Kindergarten" (mimeographed, August 1966), cited by Levitan, p. 159.

[47]U.S. Congress, House Committee on Education and Labor, 1966 Amendments to the Economic Opportunity Act of 1964 (Washington, D.C.: Government Printing Office, 1967), part 2, pp. 1133-41, cited by Levitan, p. 158.

[48]Harold W. Watts and David L. Horner, "The Educational Benefits of Head Start: A Quantitative Analysis" (Madison: Institute for Research on Poverty, University of Wisconsin, 1968), p. 24, cited by Levitan, p. 159.

of minor importance in the state. With the exception of legal services (limited mostly to Fort Berthold and Standing Rock), these programs were never significant operations on the reservations and what funds were channeled into North Dakota were expended mainly in Cass County. In essence, then, OEO's direct involvement with reservation problems consisted of Head Start, Vista, the funding of local projects initiated by ICAA's, and the financing of the ICAA's themselves.

It is difficult to judge the effectiveness of ICAA's apart from the national emphasis programs which they administered. CAP funds were not overly plentiful. Actually, funding appears to have been below that of comparably depressed areas, e.g., average expenditure per poor person was 17 percent less than the average for the ten largest recipients of CAP funds in 1968. With perhaps one exception, Standing Rock, a substantial portion of CAP funds were used for staff salaries thereby reducing the scope of services provided to the poor. Still the bulk of the funds supported a variety of locally developed programs and activities. One of the more important results was an improvement in the utilization of existing programs of governmental agencies. More significantly, there is evidence that tribal leadership and community involvement in reservation affairs accompanied the establishment of ICAA's. The most noticeable development was a heightened interest in development planning which brought together members of tribal councils, representatives of industry, agriculture, and financial institutions. The degree to which the Indian community at large was regularly involved is unknown but given the importance of Head Start greater participation is likely to have taken place.

Planning did not originate, however, with the appearance of ICAA's. Tribal councils had formed planning committees which prepared Overall Economic Development Plans in accordance with ARA requirements in order to be classified as Redevelopment Areas. Most reservations had achieved this status by 1964. Moreover, the BIA required each reservation to prepare a 10 year development plan by 1965. Consequently, the evolution of development planning can not be attributed solely to the influence of OEO; instead, CAP had a supportive effect and intensified a trend that was already underway. This is not surprising since many of OEO's programs complemented or simply duplicated the programs of other agencies.

C. Manpower Programs

In the field of manpower, a number of programs pertain to the employment problems of Indians. The principal agencies involved are the BIA and the Department of Labor.(DOL) BIA programs are of the longest standing with most of DOL's programs dating from the early 1960's, several of which are OEO delegated programs.

Table 23 presents the expenditures under each major manpower program for the selected years 1967, 1969, and 1971. Focusing on the figures for 1969* one perceives their relative importance. An interesting feature of the data is that DOL expenditures in reservation areas rival those of the BIA. Furthermore, DOL spent 44 percent of the funds obligated for MDT, NYC, and Mainstream activities in North Dakota in Indian reservation counties. Complementation and minimal duplication between the programs are also clearly revealed. BIA dominates the field of adult-training and job placement

*The most recent year for which comparable data are available.

TABLE 23

MAJOR MANPOWER PROGRAMS IN NORTH DAKOTA
1967, 1969, 1971[a]

	Reservation Areas			State		
	1967	1969	1971	1967	1969	1971
Training and medial Programs						
Dept. of Labor						
MDT	$14,466	$117,628	$ 13,135	$1,236,912	$638,494	$1,217,370
MDTA-Public Service	-	-	306,322[b]	-	-	456,322
OJT	-	-	-	-	315,795	18,765
WIN	-	-	-	-	357,290	110,000
Occupational Dev't BDA	-	-	-	212,769	-	-
BIA						
Adult Voc'l Training	86,467	858,495	n.a.			
On Res'n AVT	-	25,730				
OEO						
Job Corps	-	-	-	1,421,899	221,442	-
b Creation						
Dept. of Labor						
NYC	290,260	368,560	490,207	926,600	919,170	1,256,590
Operation Mainstream	-	345,660	534,400	-	345,660	534,400
JOBS	-	-	110,873	-	-	124,356
BIA						
Direct Employment Ass't.	46,529	104,054	n.a.			

[a]Compiled from: Office of Economic Opportunity, Federal Outlays in North Dakota (Washingto vernment Printing Office), various years cited.

[b]Mountrail County only.

while DOL stresses youth-work programs.

1. Employment Programs

In terms of persons served, job-creation programs have been stressed especially those serving the young (Table 24). Among the latter, NYC has been the largest. Since 1970, however, BIA's employment assistance program has increased in tempo, relocating 6,700 persons from July 1, 1970 to June 30, 1973.[49]

Youth Programs

NYC provides part-time employment and skill training for youths 16 to 21 years old coming from families with incomes below the poverty level. The program mainly provides part-time work (15 hours per week during the school year and 30 hours per week during summer) for those in school, hoping that an income will prevent dropouts for financial reasons. Work, training, and income opportunities are also available to school dropouts between the ages of 16 and 18. Initially, school-year enrollments exceeded all others but now the summer component is the largest, serving over 2000 teenagers in the state in 1972.[50]

As in the case of Head Start, the other OEO-conceived program popular with Indians, NYC has been closely monitored. Unfortunately, existing studies

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[49]Calculated from records published annually in Aberdeen Area Statistical Data.

[50]In-school component fell from 91 percent to 2.7 percent of all enrollments from 1965 to 1971. During the same period, summer enrollments grew to 92 percent. Based on data in U.S. Department of Labor, Manpower Report of the President (Washington: Government Printing Office), Table F-4 and Table F-2 for 1965 and 1972 respectively.

TABLE 24

NUMBER OF INDIANS SERVED BY MAJOR MANPOWER PROGRAMS, 1969 AND 1971, BY TYPE OF PROGRAM AND FUNDING AGENCY.

	1969		1971	
Training Programs				
Dept. of Labor				
MDTA	92[a]		5[e]	
New Careers	-		237[f]	
Bureau of Indian Affairs				
AVT	208[b]		299[b]	
Subtotal Training Programs		300		541
Job Creation Programs				
Dept. of Labor				
NYC	561[c]		723[g]	
Mainstream	100[d]		100[h]	
Bureau of Indian Affairs				
DEA	365[b]		2340[b]	
Subtotal Job-Creation Programs		1026		3163
Total Indians Served		1326		3704

[a] Based on average expenditure per person served of $1277. Computed from data in Table 23 and Manpower Report of the President 1970, Table F-6, p. 309.

[b] Aberdeen Area Statistical Data, years cited.

[c] Based on average expenditure per person served of $657. Computed from data in Table 23 and Manpower Report of the President 1970, Table F-2, p. 305.

[d] Based on average expenditure per person served of $3450. Computed from data in Table 23 and Manpower Report of the President 1970, Table F-2, p. 305.

[e] Based on average expenditure per person served of $2690. Computed from data in Table 23 and Manpower Report of the President 1972, Tables F-2 and F-7, pp. 262-263.

[f] Based on average expenditure per person served of $1290. Computed from data in Table 23 and Manpower Report of the President 1972, Tables F-2 and F-7, pp. 262-263.

TABLE 24--Continued

[g]Based on average expenditure per person served of $678. Computed from data in Table 23 and Manpower Report of the President 1972, Tables F-2 and F-7, pp. 262-263.

[h]Based on average expenditure per person served of $5340. Computed from data in Table 23 and Manpower Report of the President 1972, Tables F-2 and F-7, pp. 262-263.

virtually ignore the program as it relates to Indians. Research has focused mainly on NYC's effect on the dropout rate and earning capacity of urban whites and blacks.

A recent study based on a nationwide sample of NYC participants produced some discouraging results. In regard to the in-school component, no appreciable benefits either in terms of higher post-high school earnings or in extending the number of years of schooling were found to be associated with participation in NYC.[51] Furthermore another study showed that participation in NYC actually reduced one's chances of graduating from high school.[52] Interestingly, the out-of-school program fares the best particularly in terms of improving the earnings of school dropouts.[53]

The gist of the foregoing is that NYC is not achieving its objectives with the exception of creating work for teenage youths. The program has been revised recently and is currently providing more skill training and remedial education. The revisions, however, apply only to urban areas.

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[51]Gerald G. Somers and Ernst W. Stromsdorfer, A Cost-Effectiveness Study of the In-School and Summer Neighborhood Youth Corps (Madison: Industrial Relations Research Institute, University of Wisconsin, July 1970), cited by Jon H. Goldstein, "The Effectiveness of Manpower Training Programs: A Review of Research on the Impact on the Poor," reprinted in Benefit-Cost and Policy Analysis, 1972, ed. by Arnold C. Harberger, et al. (Chicago: Aldine Publishing Company, 1973), p. 351.

[52]Gerald D. Robin, An Assessment of the In-School Neighborhood Youth Corps Projects in Cincinnati and Detroit, With Special Reference to Summer-Only and Year-Round Enrollees, National Analysts, Inc., Philadelphia, February 1969, p. ii, cited by Goldstein in Benefit-Cost and Policy Analysis, p. 355.

[53]Michael E. Borus, John P. Brennan, and Sidney Rosen, "A Benefit-Cost Analysis of the Neighborhood Youth Corps: the Out-of-School Program in Indiana," The Journal of Human Resources, Spring, 1970, pp. 139-159, cited by Goldstein in Benefit-Cost and Policy Analysis, p. 356.

The program remains basically unchanged in rural areas. Under the circumstances, then, the emphasis of summer NYC on the reservations appears to be a rational policy. On the other hand, one could argue that the out-of-school component should be given more stress.

Adult Programs

Adult Indians encountering labor market difficulties are aided primarily by BIA's Direct Employment Assistance program (DEA). Under this program, Indians and their families are sent to an urban employment center if a job cannot be found near the reservation. Most participants are unemployed at the time of their application, over 90 percent by some estimates.[54] Upon arrival at the center, participants are provided low-rent housing, a living allowance while they look for work, and follow-up services for one year after finding a job.

Over a five year period (1968 to 1973), 7525 persons left North Dakota reservations under this program.[55] Men in their early twenties were the largest proportion of those departing for urban centers, outnumbering women about 3 to 1.[56] The majority of the participants were family members and averaged about 65 percent of those leaving each year.[57] Thus, at first glance, one is left with the impression that one dimension of the employment problem is in the process of being solved.

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[54] Alan Sorkin, "Manpower Programs for American Indians," Journal of Economics and Business, Vol. 26, No. 1 (Fall 1973), 54.

[55] Based on records published annually in Aberdeen Area Statistical Data.

[56] Ibid.

[57] Ibid.

Not exactly. A major flaw of the relocation program is that many who relocate eventually return to their home reservation. At one time, when the BIA was keeping records on returnees (1953-1957), 33 percent returned the same year they departed.[58] More recently a study found that in some cases 75 percent return during the first few years of relocation.[59] Generally speaking, the return rate is closer to 50 percent.[60]

Data on the number of returnees are not available for North Dakota reservations, making analysis of the program difficult. There are ways, nonetheless, by which the return rates can be approximated. Perhaps the most direct method is to estimate crude population growth from a base year, subtract out the number of persons departing during the interim, and then compare the resulting figure with the actual population recorded for the terminal year. The procedure can be further refined by focusing on the working-age population. The results, of course, are only suggestive.

At the beginning of 1970 the Indian population was 16,098[61] which would have numbered 18,118 at the end of 1973, assuming an annual growth rate of three percent. The actual population at the end of that time was 17,023, suggesting a net outmigration of 1,095 persons. During this period, BIA figures show 7906 people departing from the reservations under the Direct

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[58] Alan Sorkin, American Indians and Federal Aid, p. 121.

[59] Joan Ablon, "American Indians Relocation: Problems of Dependency and Management in the City," Phylon, Vol. 26 (Winter 1965), 365-66.

[60] Sorkin, "Manpower Programs for American Indians," 54.

[61] Aberdeen Area Statistical Data, 1969.

Employment Assistance and the Adult Vocational Training Programs.[62] These two "facts' imply that 6811 persons migrated onto the reservations during this period.

Focusing on the working-age population,* one discovers several matters of interest. Table 25 indicates that 46 percent of the population in 1969 and 44 percent of the population in 1973 were of working age. Furthermore, under the conditions set forth above, the number of people in the age category 16-64 would have been 8277 by 1973 providing the effects of migration are ignored. As it is, the data imply a net outmigration of 825 persons during these four years. Since approximately 5060 adults participated in the BIA employment and training programs, a minimum of 4235 adult Indians must have correspondingly returned to the reservations. In other words, a net outmigration of 10 percent of the working-age population occurred despite a high return rate. Moreover, the greatest outmigrations took place on the two largest reservations, Turtle Mountain and Standing Rock, in the age group 20-34.

A factor complicating the analysis is that these programs have been in use for 20 years. Consequently, there is large population of former reservation residents of which a relatively low percentage but nevertheless a sizable number could be returning to the reservations each year. In this event the number of returnees could be well above the figures cited. Moreover, it is probable that the longer a person is away from his home reservation the less likely it is he will ever return. The probability of high return rates is

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[62]Based on figures in Aberdeen Area Statistical Data, for the applicable years. Inclusion of AVT departures is consistent as training is given at centers away from the reservation with relocation in urban areas where job opportunities are more compatible with newly acquired skills.

*Here defined as those persons 16-64 years of age because of data limitations.

TABLE 25

WORKING-AGE POPULATION BY AGE GROUP AND RESERVATION, FY 1969 AND FY 1973

	Working-Age Population						
	16-19	20-24	25-34	35-44	45-64	Total	Total Population
1969							
Fort Berthold	290	191	277	289	221	1,268	2,689
Fort Totten	132	134	172	126	151	715	1,749
Standing Rock	394	469	649	385	489	2,386	4,712
Turtle Mountain	677	510	590	511	697	2,985	6,948
Total	1,493	1,304	1,688	1,311	1,558	7,354	16,098
1973							
Fort Berthold	300	200	280	292	220	1,292	2,775
Fort Totten	184	152	187	175	163	861	1.995
Standing Rock	455	372	507	424	583	2,341	4,868
Turtle Mountain	665	498	565	565	665	2,958	7,385
Total	1,604	1,222	1,539	1,456	1,631	7,452	17,023

Computed from: U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data (Aberdeen Area Office, years cited).

further enchanced by the following considerations. In some years those departing under these programs amount to about 20 percent of the population, implying that this group constitutes the bulk of those leaving in any given year. Furthermore, given the cultural differences between tribes, one can take for granted that those migrating onto the reservations are chiefly former residents. The conclusion under these conditions is straight forward: a high percentage of Indians participating in DEA and AVT programs return in the early years of relocation. In fact, a 50 percent or even a 75 percent return rate is within the realm of possibility.

On the basis of the foregoing, the reservations are experiencing population growth with net outmigration. The evidence suggests that employment programs involving relocation exert a restraining effect on population size, although not to the degree envisioned at the time of their formulation. For one reason or another many Indians find life on their home reservations preferable to that in cities and, consequently, return soon after they relocate. It may not be surprising to learn that DEA is not working very well; however, what is disturbing is the same judgement applies to programs involving training before or in conjunction with relocation.

2. Adult Training Programs

Historically, training programs have been less important then job-creation programs mainly because of funding limitations and high per-capita costs. For example, per-capita costs of training programs like AVT are typically twice as high as the costs of non-training programs such as DEA. On-the-job

training (OJT) is of course a well documented exception.[63]

High costs are only one side of the story, for costs can be justified generally if program benefits are sufficiently great. On the basis of benefit-cost studies OJT is the most efficient BIA program (rate of return varies from 9 to 18 percent) followed by DEA.[64] AVT trainees tend to have incomes substantially in excess of OJT or DEA participants; however, the cost of AVT is so extreme as to make it the least efficient of the three.[65]

Concerning DOL programs, MDTA was dominant until recently when Public Service Careers took over that position. Research into the effectiveness of MDTA has produced results similar to those concerning AVT.[66]

Dropout rates are high for both BIA and DOL training programs. Nationally, BIA's OJT has the highest rate of attrition (63 percent), even exceeding the rate for DEA. AVT attrition is comparable with the MDTA rate, 38 and 36 percent respectively.[67] Hence, from the standpoint of completion rates, the performance of manpower programs is particularly disappointing,

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[63] See, for example, Jacob Mincer, "On the Job Training: Costs, Returns and some Implications," Journal of Political Economy, 70 Supplement. (October 1962), or Allen H. Miner, Leslie M. Appleton, Marvin A. Kaplen, and Curtis H. Knight. Cost Effectiveness Analysis of On-the-Job and Institutional Training Courses, Planning Research Corp., Washington, D.C., 1967.

[64] Sorkin, "Manpower Programs for American Indians," 51.

[65] Ibid.

[66] See Goldstein, "The Effectiveness of Manpower Training Programs," pp. 340-350.

[67] Ibid., p. 52.

suggesting that they may be poorly conceived or inefficiently operated. At any rate, the needs of the disadvantaged are being inadequately dealt with.

The programs discussed so far were devised to meet the general manpower needs of the disadvantaged. With the exception of locally initiated programs developed by ICAAs, national programs were the sole components of efforts striving to overcome manpower problems through training and job placement during the last decade. This changed, however, when the United Tribes Employment Training Center (UTETC) began operations in Bismarck in 1969.

D. Employment Training Center

UTETC is a direct result of the cooperative spirit which led to the founding of the United Tribes Development Corporation (UTDC) in 1967. The two are closely related for the board of directors of UTDC also serves as the executive board of the Center. The Center is unique in that it is an Indian managed operation employing over 100 people of whom 60 percent are Indians.

The functions of the Center resemble those of other training centers located in Madera, California and Rosewell, New Mexico. The purpose of these centers is to provide vocational training, basic education, job orientation, counseling, job placement and follow-up services to persons who are not high school graduates. UTETC gears its programs to the family, but single individuals comprise a sizable part of the student population.

Although it is too soon to assess the performance of UTETC accurately, there is evidence that in some respects it is not unlike that of Rosewell and Madera. For example, 415 Indians were enrolled in 1972 of whom 31 percent

completed their training that year.[68] Out of the remaining 285 students 127 left without completing their training, implying an attrition rate of 44 percent.[69] This corresponds closely, at least for one year, with the 46 percent dropout rate[70] of the other two residential centers. At this point it must be emphasized that UTETC has been in operation only six years and under Indian management only during the last four. This is important because the other Centers are administered under contracts with private industry. Perhaps Indian administration and staffing will allow UTETC to improve upon the performance of the Rosewell and Madera Centers. Incidently this is a good possibility, for UTETC placed 82 percent of its graduates and 42 percent of its trainees in 1972 which compares favorably with the 42 percent unemployment rate for graduates of the other Centers.[71]

More importantly, UTETC's activities are not limited to conventional areas of vocational training. The Center's operations can be dovetailed with the development programs of individual reservations adapted to special needs. This has already happened in the case of the Fort Berthold Reservation. In 1972 the Center undertook the training of the household staff, cooks, maids, clerks and other personnel of the Four Bears recreational park. Also in 1972 a special training project was conducted under which 38 persons were trained in law enforcement for work on the reservations.

Perhaps the most important project presently underway concerns the development of educational materials, teaching techniques, and counseling

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[68] Overall Economic Development Plan, United Tribes Employment Training Center, Bismarck, North Dakota, 1973, p. 19.

[69] Ibid.

[70] Sorkin, 52.

[71] Ibid.

methods specifically designed to cope with the problems of Indians. The objective is to develop, test, and distribute these materials to Indian educators throughout the country. Needless to say, such work is long overdue and hopefully will produce an array of educational tools capable of succeeding where others have failed.

E. Overall Assessment of Manpower Programs

Thus far the programs have been evaluated in terms of their scope, achievement of objectives, and relationship to the development needs of reservations in the state. Each of the programs pertains in one way or another to employment, and the question remains whether the programs taken collectively have improved employment conditions on the reservations.

Taking a long-run view of the employment situation, one finds that the rate of labor-force participation was higher and the rate of unemployment lower in 1970 than in 1950 and 1960.[72] Male and female participation rates exhibit opposite trends from 1950 to 1970: the rate for males fell from 62 to 54 percent while the female rate rose from 13 to 32 percent. Conversely, the unemployment rate for men increased from 25 to 28 percent while the female rate fell from 18 to 13 percent

Given the constancy of the population who are disabled and the improving level of health, the decline in male labor-force participation is somewhat puzzling. One reason could be a rise in the number of men 16 to 24 years old staying in school. Data for North Dakota are hard to obtain but area figures

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[72]Rates computed from: 1970 Census, Subject Report, American Indians, Table 4., p. 33; 1960 Census, Subject Report, Nonwhite Population by Race, Table 56., p. 238; 1950 Census, Special Report, Nonwhite Population by Race, Table 21., p. 74.

published by the Aberdeen Office provide contrary evidence, at least for recent years.[73]

An alternative explanation rests on the inadequacy of job opportunities for men. Many agricultural jobs have been eliminated since 1950 as a result of mechanization without a corresponding expansion in positions requiring comparable skills. Also, AVT and MDTA trainees returning to their reservations have frequently found job possibilities almost as limited as before their training. Conceivably, such factors could produce a sense of futility culminating in withdrawal from the labor force.

An additional factor in this respect is suggested by the increasing rate of entry into the labor force by women over the last 20 years. A good possibility is that women are more suitable for the work which is available and likely to be forthcoming. Simply on the basis of education Indian women have a competitive advantage for they have more schooling on the average than men of the same age.[74]

On the other hand, manpower programs could be mainly responsible. Since a major proportion of trainees and relocatees return to their home reservation, DEA and AVT training have potentially opposing effects on the actual size of the labor force whose measure excludes persons who are not looking for work. Under these circumstances, vocational training tends to increase the size of the labor force whereas direct relocation has an opposite or neutral effect. The reason for the difference lies in the

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[73]The proportion of the Aberdeen Area population over 16 enrolled in school actually dropped from 14 to 13 percent between 1967 and 1973. Based on figures in Aberdeen Area Statistical Data for the years 1967 and 1973.

[74]In 1970, 69 percent of the women of the Turtle Mountain and Standing Rock reservations had attended high school whereas only 55 percent of the men had the same level of schooling.

fact vocational training theoretically increases a person's employability thus making entry into the labor force more likely. Hence, if a significant number of returnees consist of trainees who previously had not regularly sought employment, as seems possible, the labor force would expand. In contrast, direct relocation involving similar kinds of individuals should not increase the size of the labor force unless the experience of relocation makes returnees more likely to seek work locally.

In the event DEA relocates mainly the unemployed, as national data suggest, the direct effect is to reduce the labor force. This is true even if a large proportion return. In this regard, a strong possibility is that Indians with the best employment prospects relocate permanently once they leave the reservation. This would imply that the majority of those returning to the reservations are persons who experience employment difficulties in the areas where they relocate. Presuming job conditions on their reservations have not changed substantially from what they were when they left, returnees could either join the ranks of the unemployed looking for work or refrain from entering the local labor force. Since the employability of those returning has not been enhanced appreciably, it is probable only a small proportion re-enter the labor market.

On balance, then, the probable effect of manpower programs is slight. In general the result depends on the relative number participating in each program and on the proportion of each who return. Since records on returnees are not available, it is not possible to do a direct appraisal. Nevertheless, the evidence (male participation and unemployment rates between 1950 and 1970 and the fact that enrollees have been mostly men) suggests the programs have

been unable to cope with employment problems of the reservations. At most, the programs exert a mild restraining effect on the size of the labor force. DEA is possibly the least effective of the two major BIA programs and may actually be counterproductive in the sense of reinforcing the tendency of unskilled male workers to leave the labor force.

Finally, reservation employment has been influenced by many factors. Poverty programs such as CAP and Head Start generated a significant number of jobs for reservation residents during this period. Economic development also played a role. In fact, these two factors probably account for most of the overall improvement in employment which took place, especially over the last ten years. Within this, a transformation of the economies of reservation areas has altered occupational requirements in such a way as to place women in ever greater demand.

CHAPTER 5

LAND AND CAPITAL RESOURCES

A. Introduction

Education, health, and other related demographic characteristics are important variables affecting the economic status of a society and their importance is no where better exemplified than by the living conditions of American Indians. Nonetheless, these factors tell only part of the story, for Indian poverty, as poverty in general, has many causes. No list would be complete which excludes the availability of natural resources and sources of capital funds.

B. Reservation Lands

Unlike population the land base of reservations is shrinking. The decreasing size of reservations is contributing to economic problems by reducing the role agriculture can play in the development process. Second, the erosion of land holdings is upsetting to tribes who associate their viability with the preservation of their lands. The land is seldom of superior fertility or richly endowed with mineral wealth but it is the home domain and a unifying force for the tribe.

The decimation of Indian lands is considered by many to be old history. While it is correct that vast reductions are events of the past sizable decreases continue, albeit gradually. Table 26 indicates the total lands held in trust for the four major North Dakota reservations in 1950 and 1970. An interesting development of the period is the slight increase in Turtle Mountain holdings in the midst of a general decline exhibited by the

TABLE 26

TOTAL INDIAN LANDS HELD IN TRUST, BY RESERVATION,
1950 AND 1970
(Acres)

	1950[a]	1970[b]
Reservation		
Fort Berthold	579,635	420,402
Fort Totten	55,107	50,232
Turtle Mountain	68,693	69,811
Standing Rock[c]	1,064,803	844,846

[a]Peter Dorner, "The Economic Position of the American Indians: Their Resources and Potential for Development", (unpublished Ph.D. dissertation, Harvard University, 1959), Table 2. Appendix.

[b]U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data, Aberdeen Area Office, 1971, pp. 21-23.

[c]Total land in North and South Dakota.

other reservations. It is significant to note the impact of the construction of Garrison and Oahe reservoirs on the Fort Berthold and Standing Rock reservations.

The completion of Garrison reservoir seriously disrupted the social and economic structure of the Fort Berthold reservation and was strongly opposed by the Three Affiliated Tribes.[75] The Missouri bottomlands were the home of the Indian population most of whom lived in small family communities located along the river. This was changed with the formation of the reservior. Geographic contiguity was destroyed as the various parts of the reservation were isolated from each other by the waters of Lake Sakakawea. All of the tribal community facilities were lost and over 90 per cent of the families were forced to relocate. More importantly, the Indian population was propelled from a subsistence existance into a setting where cash income was a necessity.

Ownership and User Patterns

Federal policy has strived to change Indians into white people from the time of George Washington. The substance of this policy was expressed in laws and programs designed to promote an agrarian way of life. Individual ownership of land was the keystone of the approach. The rationale was that Indian families operating their own farms would develop a sense of acquisition

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[75] Most of this paragraph is based on U.S. Department of the Interior, Bureau of Indian Affairs, Missouri River Basin Investigations Project (MRBIP), The Fort Berthold Reservation Area - Its Resources and Development Potential, Report No. 196., Billings, Montana, June 1971, p. 9.

and possession thereby stimulating individual initiative and industry. The General Allotment Act of 1887 was the culmination of this philosophy, providing the framework by which the "modernization" of Indians was vigorously pursued for the next forty years.[76]

The allotment of reservation lands dealt a serious blow to tribal organization of Indian life and determined the fate of the reservation economy. The present utilization of Indian lands can be traced largely to the policy of allotment and the attendant matter of heirship. When the original allotee died his heirs were given equal but undivided interests in his lands. Now in the hands of subsequent generations the allotments have many claimants whose interests must be respected in however the land is used. This division of interest along with the small size of allotments makes efficient livestock and farming operations difficult. As a result, lands are frequently leased to non-Indians, left idle, or sold whenever agreement between the interested parties can be reached. Moreover, the management of allotted lands, which are trust lands, is problematical for the BIA with sale and rental transactions absorbing a disproportionate amount of time of Bureau personnel. Indeed, the cost of calculating the various shares of rental or sale income in many cases exceeds the value of the shares themselves.[77]

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[76]For an excellent account of the events of this period, see Angie Debo, A History of the Indians of the United States, (Norman, Oklahoma: University of Oklahoma Press, 1970), pp. 251-288.

[77]A striking example involves the purchase of a tract of land on the Crow Creek Reservation in 1955. The transaction involved 116 acres of land that had 99 heirs whose fractional shares ranged from $.37 to $1,152.75. The computation of the 99 fractional shares required a common denominator of 54,268,714,886,400. Peter Dorner, "The Economic Position of American Indians: Their Resources and Potential for Development" (unpublished Ph.D. dissertation, Harvard University, 1959), p. 108.

North Dakota is among the states with the most allotted lands.* The proportion of reservation lands held by individuals ranged from 99 percent at Fort Totten to 49 percent at Turtle Mountain in 1970 (Table 27). Over the past twenty years tribal land has increased relative to allotted land on only the Fort Berthold and Turtle Mountain reservations,[78] largely as a result of sales of individual allotments to the respective tribes.

Table 27 suggests an inverse relationship between the relative amount of allotted Indian land and the proportion of Indian land used by Indians. Within this, the rate of Indian utilization is effected by the degree of fragmentation and size of allotments. It is reasonable to presume that Indian use of reservation land falls as fragmentation increases and average allotment size decreases. Still reservations with a high proportion of allotted lands can have a high rate of Indian usage if parcels of land are of above-average size and/or the number of claimants per allotment is below average. Finally, the nature and quality of the land and the productive abilities of the allottees affect the degree of Indian usage and the pattern of production which the land will best support. These factors undoubtedly explain much of the variation in Indian utilization of reservation lands in the state, but further analysis is needed in order to determine the relative importance of each.

Land Use

Most reservation lands are used for agricultural purposes, primarily the grazing of livestock and raising of cash crops (Table 28). Turtle

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*The states with the most allotted lands listed according to their rank order are Oklahoma, Montana, North Dakota, South Dakota, Idaho, and Washington.

[78] 52 and 95 percent of the land was allotted in 1957 on the Turtle Mountain and Fort Berthold reservations, respectively. See Dorner, p. 25.

TABLE 27

LAND OWNERSHIP AND USER PATTERNS BY RESERVATION, 1970

	Ownership		User	
	Tribal	Individual	Indian	Non-Indian or idle
Fort Berthold	9.9	90.1	66.8	33.2
Fort Totten	.9	99.1	22.2	77.8
Turtle Mountain	51.3	48.7	87.8	12.2
Standing Rock	35.8	64.2	42.9	57.1

Computed from: U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data (Aberdeen: Aberdeen Area Office, 1970), p. 22.

TABLE 28

LAND USE OF RESERVATION LANDS BY RESERVATION, 1970

	Fort Berthold	Fort Totten	Turtle Mountain	Standing Rock N.D.	Standing Rock S.D.
Grazing	379,726	19,434	12,152	267,121	502,254
Indian use	274,124	2,332	8,407	120,673	248,676
Non-Indian use	105,602	14,994	2,855	144,773	252,785
Idle	-	2,108	890	1,675	593
Dry Farm	61,455	20,810	13,500	20,575	31,067
Indian use	17,527	1,164	11,712	3,109	7,127
Non-Indian use	43,928	14,849	1,788	17,296	23,940
Idle	-	4,797	-	170	0
Irrigated	-	-	-	-	-
Indian use	-	-	-	300	-
Non-Indian use	-	-	-	-	-
Forest (C)	-	-	-	-	2,155
Indian use	-	-	-	-	2,155
Non-Indian use	-	-	-	-	-
Idle	-	-	-	-	-
Forest (NC)	10,830	7,250	40,350	4,269	6,466
Indian use	10,830	7,250	40,350	..	6,466
Non-Indian use	-	-	-	-	-
Idle	-	-	-	-	-
Wild Land	-	2,298	2,672	-	-

TABLE 28--Continued

	Fort Berthold	Fort Totten	Turtle Mountain	Standing Rock N.D.	Standing Rock S.D.
Other	164	933	1,136	6,195	4,443
Indian use	-	520	821	4,055	3,113
Non-Indian use	-	163	315	2,140	1,330
Idle	164	250	-	-	-

Source: U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data (Aberdeen: Aberdeen Area Office, 1971), pp. 24-27.

Mountain is an exception as close to 60 percent of the land consists of forests of no immediate commercial value. The latter is true as well for the stands of timber on the other reservations. Ranching dominates farming on the Fort Berthold and Standing Rock reservations. Cattle operations are, of course, the most important, followed by the raising of sheep and hogs. Wheat is the major crop raised on each reservation, but sizable crops of oats, barley, hay and flax are also grown.

Land-use patterns reflect the topography and soil composition of Indian lands. Pasture lands predominate overall with Fort Berthold and Standing Rock having the highest proportions of their lands devoted to range-livestock production. A substantial portion of the lands of the latter two reservations lie on the Missouri plateau, approximately two-thirds of which consists of moderately rolling plains with major drainages. The latter together with climatic factors make this part of the plateau best suited for cattle operations. A significant amount of Fort Totten and Turtle Mountain lands are also used for grazing; however, much of the pasture is of poor quality with a low carrying capacity due mainly to an extremely stony soil.

The Fort Totten situation is particularly severe. According to some studies, the grazing capacity of range-land on the reservation is about 50 percent below normal.[79] The land in general has little agricultural value and much of it could be classified as submarginal.[80]

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[79]James O. Fine, "An Analysis of Factors Affecting Agricultural Development on the Fort Totten Indian Reservation" (An Unpublished Master's Thesis, University of North Dakota, 1951), p. 42.

[80]Overall Economic Development Plan Fort Totten Redevelopment Area, Fort Totten, North Dakota, 1962, p. 70.

With the exception of Fort Totten, cropland is generally of good quality and occasionally very rich, e.g., the black soil of the Turtle Mountain reservation. Under favorable weather conditions Turtle Mountain farms are very productive with average yields of 50 bushels of wheat per acre. In general, crop production is restricted to the gently rolling, almost level lands of the Glacial Drift Prairie comprising the eastern portion of the reservations and, in the case of Fort Berthold and Standing Rock, the relatively level lands of the Missouri plateau. Operations are as intensive as topographical and soil quality factors permit, and there appears to be little possibility of profitably extending farming into areas which are still wooded. In some instances the quality of the soil would support extending crop production but erosion and drainage problems appear insurrmountable.[81]

Mineral Resources

Sand and gravel are available in sizable quantities on reservation lands and, consequently, are a major source of mineral production. Commercial utilization of these minerals has been limited mostly to road material and thus has not been extensive. Lignite deposits underlay much of the Standing Rock and Fort Berthold reservations. Potential for commercial production is greatest in the Fort Berthold area where estimated lignite reserves

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[81]See, Kenneth D. Jensen, "A Land Utilization Survey of the Turtle Mountain Indian Reservation, Belcourt, North Dakota" (unpublished Master's Thesis, University of North Dakota, 1964); Tony John Kuz, "A Land Use Survey of the Outlying Indian Land in Rolette County, North Dakota" (unpublished Master's Thesis, University of North Dakota, 1964); U.S. Department of the Interior, Bureau of Indian Affairs, Missouri River Basin Investigation Project (MRBIP), The Fort Berthold Reservation Area: Its Resources and Development Potential, Report 196, Billings, Montana, January, 1971.

are 165 billion tons - 14.9 billion on the reservation itself - in beds averaging two to three feet in thickness.[82] In contrast, coal seams in the Standing Rock area are relatively inaccessible for strip mining and vary greatly in thickness (ranging from less than an inch to seven feet).

Oil and gas production is an important part of the Fort Berthold economy and the reservation is one of six which annually account for about 50 percent of the total mineral income from reservation lands.

Production began in 1953 and expanded rapidly until 1960 when oil output levels stabilized between 450,000 and 700,000 barrels per year.[83] Correspondingly, income from oil and gas peaked between $680,000 to $3,000,000 during the first years of production.[84] Since 1960 income has stabilized between $250,000 and $400,000.[85]

Individuals receive the bulk of the mineral income, accounting for 97 percent of the $15 million received since exploitation began.[86] The significant point about this is that the income has been a windfall to allotees with holdings in the oil producing area of the reservation (single ownership is dominant with only 34 percent of the land having multiple claimants).[87] As a result, the benefits of oil production

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[82] MRBIP, Table 8., p. 39.

[83] Ibid., Appendix Table 10., p. 129

[84] Ibid.

[85] Ibid.

[86] Ibid., p. 43 and Appendix Table 10.

[87] Ibid., Table 8., p. 39.

have not been shared equally among tribal members. Just as importantly, little employment has been created on a permanent basis, and, the experience has not provided much opportunity for the development of managerial skills.

C. Development Potential

Minerals

Of the vast lignite deposits, only 22 billion tons are measured and indicated reserves of which 14 billion are in seams over 5 feet thick and capable of being recovered through strip mining.[88] Of this latter amount, 1.3 billion tons lie within the Fort Berthold reservation.[89]

Total lignite production in the state almost doubled between 1960 and 1970 and is projected to approach 8 million tons by 1975.[90] During this period production in Mercer County increased significantly (expanding by 66 percent between 1966-1968 alone) and presently accounts for over 60 percent of the yearly production of the state.[91] Correspondingly, mining employment in the state rose by 38 percent but doubled in Mercer County.[92]

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[88] Ibid., Table 8., p. 39.

[89] Ibid.

[90] Extensive Utilization of Lignite in the West River Diversion Area: A Study of Material Requirements and Population-Economic Impact, The Engineering Experiment Station, University of North Dakota, Grand Forks, North Dakota, 1973, p. 12.

[91] Mineral and Water Resources of North Dakota, Report prepared by the United States Geological Survey and United States Bureau of Reclamation (Washington: U.S. Government Printing Office, 1973), p. 53.

[92] Computed from data in U.S. Department of Commerce, County Business Patterns for the years indicated.

Recent estimates place electrical generating capacity in 1980 at three times the present level. Presuming current technology and the construction of separate generating facilities of 500 megawatts capacity, direct employment in major lignite producing counties could increase by 700.[93] Furthermore, at least one coal gasification plant will probably be on line within 10 years which by itself will create over 1000 permanent jobs.[94] Under present conditions these events would be sufficient to absorb almost the entire labor force of Fort Berthold and Standing Rock or alternatively to provide work for all Indians currently unemployed in the state.

Under the circumstances, Fort Berthold has the greatest potential for economic development based on the exploitation of natural resources, with the commercial utilization of lignite possibly the most promising. Even if future growth only mirrors the present pattern of utilization, which seems improbable, Fort Berthold will benefit at least indirectly from an economic expansion of the reservation area. Actually the reservation stands a good chance of benefiting directly because of its proximity to Garrison Reservoir.

However, it might be unwise to rely too heavily on lignite for several reasons. First, employment will not consist solely of state residents much less Indians. Second, operations may never attain the levels currently envisioned because they may be nipped in the bud, for example,

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[93] Based on data in Extensive Utilization of Lignite, Table 10., p. 52.

[94] Ibid.

by off-shore production of oil and gas or the exploitation of oil shale deposits. Lastly, environmental considerations may seriously restrict strip mining thereby indefinitely postponing a large-scale development of the lignite beds.

In the absence of coal development the economic problems of the reservations will prove more difficult to solve. There are, of course, alternatives to mineral production but in each case the potential contribution to economic development is not as important. Three such fields are tourism, recreation, and light manufacturing; to some extent there are also opportunities in agriculture.

Agriculture

Twenty years ago agricultural development was viewed by some as a panacea. Then, land development appeared more sensible than the establishment of industrial firms or the construction of tourist and recreational complexes. In 1959 Dorner concluded that 33 percent of the Indian families in North Dakota could be gainfully employed on reservation farms and ranches by making full use of the land base.[95] It was envisioned that this could be accomplished by tribal purchases of scattered allotments and adjacent non-Indian tracts which would then be combined into efficient agricultural units. As it turns out, tribal funds proved inadequate for this purpose and federal assistance has not been forthcoming. Consequently Indian lands are not fully utilized, and, furthermore, the land base continues to shrink. Accordingly, agricultural employment opportunities are fewer than

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[95]Dorner op. cit. Table 16., pp. 136-137.

before and of those remaining many continue to be wasted. Thus, agricultural development depends, as it has for many years, upon a reorganization of land-use patterns with the consolidation of scattered holdings into efficient, reasonably contiguous units a necessary first step. A reduction in the number of claimants per parcel of land is another.

In addition to land consolidation, a more intensive and efficient use of lands currently under Indian control would yield substantial gains. Opportunities for improved technology and management exist on all reservations but are most significant on Fort Berthold and Standing Rock.[96] Crop and livestock production could be expanded and made more profitable by the development of small tracts of irrigated lands thereby enlarging the feed base for livestock. Livestock production could also be increased by improving range management. All things considered, the development of management skills on the part of Indian operators is perhaps the foremost prerequisite. In this regard extension services are provided by the Department of Agriculture but the scale of operations are inadequate, averaging about one extension agent per reservation.

Given the intractability of the land tenure problem it is difficult to foresee a major role for agriculture in reservation development; still there are ample incentives for a renewed effort in this direction. First of all, the world food situation seems to be turning for the worse,

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[96] See MRBIP, Report No. 196, The Fort Berthold Reservation Area, pp. 71-98; Overall Economic Development Plan, Standing Rock Redevelopment Committee, various years; The Fort Yates Land Use and Recreational Planning Report, Corwine and Doell Park Consultants, Minneapolis, Minnesota, 1964, pp. 19-21. Rest of this paragraph is based on recommendations given in MRBIP.

signaling a rise in the prices for agricultural commodities. Secondly, the geographical distance of reservations from urban areas and the supply of unskilled labor give agriculture an advantage over economic activities based on resources which must be imported into the state.

Faced with almost insurmountable obstacles in the path of agricultural development, it is thus not surprising that reservations have turned to developing tourist and recreational sites and the attraction of industry.

Tourism and Recreation

Standing Rock and Fort Berthold have invested the most extensively in tourism and recreation. Again these two reservations have a comparative advantage, this time in water related sports. Potentially, Devil's Lake could offer similar opportunities for Fort Totten but this is contingent on the fate of the Garrison Diversion project. The deciding factor, however, is proximity to urban centers and major tourist routes. In this connection, Fort Berthold and Standing Rock are the most favorably situated but their location is far from ideal.

Recreation and tourism are attractive fields for development because operations are labor intensive relative to other kinds of economic activities suitable for reservation areas. Providing an appropriate level of operation is warranted, unemployment could be reduced substantially by rather modest investments in lodging, boating, and camping. On a limited scale such facilities have been constructed at New Town, Fort Yates, and Mobridge.

Prospects in this direction are not overly encouraging, however. First, the climate is unattractive to many out-of-state tourists and the season too brief to allow extensive use of recreational resources by regional residents. Secondly, the region has a history of being an area that tourists pass through on their way to major recreational areas. Stops are brief and are restricted, for example, to visits to historical sites or Oahe and Garrison dams. Finally, the major East-West tourist routes are farther south, causing tourist travel in the region to be comparatively light.

Unsurprisingly, then, recreational sites in North Dakota serve a regional market. A study made in 1964 identified the primary market as lying within a 50 mile radius of a recreational area like Garrison.[97] More importantly, the income characteristics of the market are such that only a small recreational complex can be adequately supported. Since on-reservation recreational sites are in low-population and low-income areas overall revenues are not likely to be impressive even if a disproportionate number of local people use the facilities with a high degree of frequency.[98] A larger market area would of course obviate these limitations but this is precluded effectively by the presence of competing units (e.g., Garrison competes with Oahe, Devil's Lake, and Teddy Roosevelt National Park).

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[97] Four Bears Park: Analysis and Progress, Mason, Law, Wehrman, Wright, Inc., Minneapolis, Minnesota, 1964, p. 31.

[98] For example, 80,000 annual visitors to Four Bears Park were expected to generate $60,000 in revenues. Ibid., p. 63.

Hence what appears on the surface as a promising prospect turns out on closer examination to be a field with limited development potential. In some cases conditions are so marginal that studies assessing the feasibility of recreational development recommend that facilities be built with non-reimbursable federal funds and predict that financial assistance may be needed periodically to cover operating expenses.[99] Nonetheless there are opportunities which can be capitalized upon. One possibility involves tourist complexes designed to appeal to tour groups. Another involves the development of museums, recreational sites, cultural exhibits, and lodging facilities along roadways in such a fashion as to assure a high share of the "stop-over" tourist trade.[100]

Industry

Tribes have also tried to attract industry to reservation areas and are aided in this effort by the BIA, EDA, and SBA. Over the last decade public facilities were improved and industrial parks established in an attempt to make the reservations more appealing to investors. In addition, low-cost financing was made available to certain kinds of firms locating on the reservations. Other incentives for investing on reservations include low-cost labor and no property tax.

The major source of industrial development funds in recent years has been the EDA. Funds have been provided for the construction of public

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[99] Ibid., p. 1; Fort Totten Land Use and Recreational Planning Report, p. 87.

[100] Both have been recommended for consideration by the Turtle Mountain Tribe by a private consulting firm. See Turtle Mountain Comprehensive Plan, Harrison G. Fagg and Associates, Billings, Montana, 1972, p. 164.

TABLE 29

CUMULATIVE VALUE OF EDA APPROVED PROJECTS FOR INDIAN GROUPS
AND THE STATE BY PROGRAM, AS OF JUNE 30, 1972,
FOR THE PERIOD 1966-1972
(Amounts in Thousands of Dollars)

	Public Works Grant	Loan	Planning Grant	Technical Assistance Grant	Totals
Fort Berthold	$1,626	$ 402	-	$ 52	$2,080
Fort Totten	200	-	-	-	200
Standing Rock	1,873	318	-	3	2,194
Turtle Mountain	410	85		3	498
United Tribes of North Dakota	-	-	451	-	451
Sioux County	259	-	-	-	259
Rolette County	2,515	799	-	-	3,314
State	6,883	1,604	451	373	9,812

Compiled from: U.S. Dept. of Commerce, Economic Development Administration, Progress Report of the Economic Development Administration, (Washington: Government Printing Office), various years.

works, planning, and technical assistance. Examination of Table 29 reveals that $5.4 million were committed directly to reservations and the United Tribes, with the bulk of the funds being channeled into public-works projects. The figure for public works represents chiefly the construction of community buildings, skill centers, public utilities (mainly water and sewage treatment plants), and recreation complexes. The last category was particularly important as about 50 percent of the public-work funds expended during this period were invested in recreation facilities at Fort Berthold and Standing Rock.

Apart from the expansion of social overhead and the construction of recreational sites, the effect of EDA expenditures on the economic development of reservations is difficult to judge. At any rate, one may reasonably assume that the development potential of the reservations increased, although permanent effects on employment and income are hard to identify. Perhaps the most significant effect is yet to be felt, stemming from the planning grants made to the United Tribes.

Between 1960 and 1973, 16 firms were established and 454 jobs created on or near reservations in North Dakota (Table 30). Most of the firms were small, labor-intensive operations in retail services and light manufacturing. Notable exceptions include MDA-Atron (Computer Memory Cores) at Turtle Mountain, and Four Bears Motor Lodge and Northrup-Dakota (electronic assemblies) at Fort Berthold. At this juncture the record looks respectable. Unfortunately seven firms closed during this period which translates into an attrition rate of over 50 percent.

TABLE 30

NUMBER OF ENTERPRISES ESTABLISHED AND AMOUNT OF INDIAN EMPLOYMENT CREATED
1960-1973
ON OR NEAR RESERVATIONS IN NORTH DAKOTA

	Fort Berthold	Devils Lake	Standing Rock	Turtle Mountain	Total
rms Established	5	2	5	4	16
rms Closings	2	1	2	2	7
Net	3	1	3	2	9
bs Created	87	228	41	98	454
bs Eliminated	15	3	32	19	69
Net	72	225	9	79	385

Compiled from: Aberdeen Area Statistical Data, various years, Industrial Development on dian Reservations in the Upper Midwest, James M. Murray, Upper Midwest Research and Development uncil, March 1969, Table VI, pp. 33-35.

Studies concerning the high rate of business failure on reservations attribute most of the closings to incompetent management. However, as James Murray points out in his study, it is not very meaningful to say business failures are due to bad management. Instead, Murray relates the poor performance of reservation-based firms to factors such as absenteeism, inadequate financing, and the fact that many were ill-conceived ventures established only as a result of tribal and governmental promotion.[101]

The importance of the above factors in explaining the failure of firms on North Dakota reservations is unknown. There is evidence, however, that some of the first firms were established without adequately examining the market potential for their products and experienced high marketing and transportation costs as a result.[102] Lately prospective investments appear to be more carefully screened.

The reservations would clearly benefit from an expansion of their economic base. To some extent, as the above suggests, this is occurring but at a relatively modest pace. The tempo of industrial development needs to be increased but there are constraining factors, the most important of which is geographical location. The options for the present seem limited to fields where transportation costs are not prohibitive, such as light manufacturing (e.g., plastics and electronics) and local services. Thus, the rate of industrial development depends on the opportunities available

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[101] James M. Murray, Industrial Development on Indian Reservations in the Upper Midwest: A Description and Evaluation, Upper Midwest Research and Development Council, Minneapolis, Minnesota, 1969, p. 32.

[102] Ibid., Table VI, pp. 33-36.

for establishing small firms, a matter difficult to anticipate, and the ability of interested parties, Indian and non-Indian, to make the investments required. Encouragingly, Indians are displaying a heightened interest in business for a growing number are entering the field.[103] Accordingly, a major component of future development policy should consist of assisting local entrepreneurs in identifying business opportunities, for they seldom manifest themselves, and in assuring that promising ventures are undertaken.

Sources of Business Capital

The scenario, then, consists of promoting the growth of small business. Consequently, the availability of finance capital is a crucial factor. Considered to be relatively risky operations, small firms find borrowing from financial institutions difficult and often impossible. Since direct recourse to the money and capital markets is out of the question, firms are forced to seek funds from federal agencies, private sources, or to rely chiefly on their own capital. In some instances, tribal funds are also available.

Although it has been a major source of funds in the area of public works, the EDA has not financed business ventures directly if the recreational complexes at Fort Berthold and Standing Rock are excluded. Further examination shows that the degree of involvement by other Federal

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[103] Nationally, the proportion of Indian males classified as professional workers or managers and proprietors has increased from four to 14 percent between 1940 and 1970, of which a growing number consists of those operating their own businesses. Alan Sorkin, "The Economic and Social Status of the American Indian, 1940-1970", Nebraska Journal of Economics and Business, Vol. 13, No. 2 (Spring 1974), 38-39.

agencies has been small. For example, financing by SBA and BIA in North Dakota jointly amounted to about $800,000 during the period 1965 to 1970, with the largest amount ($350,000) going to a Fort Totten firm.[104]

The potential for tribal financing is reflected in part by the trust fund holdings of each tribe. Table 31 reveals a tremendous disparity in the distribution of tribal wealth. Fort Berthold and Standing Rock are clearly in the best position to commit capital to industrial development or development projects in general, but their potential involvement is obviously limited. Besides, the overall size of asset holdings is not the only limitation. The trust funds, although owned by the tribes, are under the guardianship of the BIA and cannot be used without its approval. Furthermore there are competing uses for funds which are annually appropriated. For example, funds are needed to support tribal programs which provide basic services such as police and fire protection to reservation residents.

Therefore only a limited portion of the trust funds are available for economic development and it is unlikely that they will be liquidated for such purposes. The BIA, with tribal approval, has been investing funds in government bonds and private securities paying a good return. There is, then, a desire to preserve capital and to earn lucrative returns on investments. Apparently little incentive exists to channel trust funds into local business projects.

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[104] SBA supplied $472,000 and the BIA provided about $300,000 to firms on or near reservations during this period. Data obtained from Small Business Administration, Annual Report, and Office of Economic Opportunity, Federal Outlays in North Dakota for the years indicated.

TABLE 31

INDIAN TRIBAL FUNDS HELD IN TRUST BY THE BIA
1962 AND 1972

	Tribal Trust Funds	
	1962	1972
Fort Berthold:		
Three Affiliated Tribes	$1,113,748	$2,005,565
Standing Rock Sioux	4,272,238	2,000,074
Turtle Mountain Chippewa	960	-
Devil's Lake Sioux	-	343

Source: U.S. Department of the Treasury, Combined Statement of Receipts, Expenditures and Balances of the United States Government for the Fiscal Year Ended June 30, 1962 and 1972.

Summary

As things stand there is little hope for reservation development without an expansion of capital. Means for financing this expansion are meager whether one considers tribal trust funds or external sources. The only reservation with substantial mineral wealth is Fort Berthold. Oil and gas are an important source of income for some residents of this reservation, though the tribes themselves have only benefited in a limited way. While it is true that Fort Berthold is underlain by substantial deposits of lignite it is questionable whether these seams will ever be exploited. Utilization depends on strip mining and this method has vastly different implications for the environment than drilling for oil and gas.

The land of the reservations has contributed what it can toward economic development. In the field of agriculture most cultivated land is already employed for crop production or for grazing livestock. Managerial talents could be improved upon in many cases, however, the gains would only apply to a few individuals and their families. The same appears to hold true for tourism and recreation.

Light industry holds the greatest promise at the moment, providing opportunities are seized as they appear. The record until now has not been good and it appears to take intense effort on the part of Indians to be efficient in this realm. Because of this record, operations on reservations are considered to be of high risk and as a result most are subsidized ventures.

CHAPTER 6

CONCLUSION

The ultimate purpose of economic development is raising the material well being of people. The route leading to this goal is strewn with obstacles and seldom direct. Unforseen factors offset the effects of even the most well-conceived plans causing confusion and discouragement among decision makers responsible for framing policy. Moreover, the path of development is long and arduous particularly where resources are meager and aid is limited, as in the case of Indian Reservations in North Dakota.

An overview of the trends in income is an appropriate way to conclude this survey for it highlights the betterment, or lack of it, occuring in the quality of reservation life. Data for each reservation would be ideal for this purpose, but such data are not generally available. Instead, several sources were consulted before comparable data were obtained on the income of families for one reservation (Turtle Mountain) for the years 1950, 1960, and 1970.

Examination of Table 32 indicates that progress has been made, both in nominal and real terms. The broad, upward shift in the distribution of income is the most notable feature of the data. If similar developments have occurred on the other reservations, and there is evidence they have, then reservation living conditions are much better than twenty years ago.

Significantly, improvements have occurred in health, education, and housing for disease and death rates are lower, educational achievement is

TABLE 2

PERCENT OF FAMILIES IN VARIOUS INCOME CLASSES,
TURTLE MOUNTAIN RESERVATION, 1950, 1960, 1970.

	(Percent)		
	1950[a]	1960[b]	1970[c]
Income Class			
less than $1000	50.0	17.0	8.0
$1000 - $2,999	37.0	47.0	26.0
$3000 - $4,999	7.0	22.0	21.0
$5000 and above	5.0	14.0	45.0

[a]Computed from: John Cassel, et al, Economic and Social Resources Available for Indian Health Purposes: A Study of Selected Reservations in the Aberdeen Area, Institute for Research in Social Science, The University of North Carolina, June 1956, Table I-IX, p. I-7.

[b]Computed from: U.S. Department of Commerce, Bureau of the Census, Characteristics of Population, General Social and Economic Characteristics, Table 88, p. 76-190.

[c]Computed from: U.S. Department of Commerce, Bureau of the Census, Subject Report PC(2)-1F, American Indians, Table 9, p. 126.

higher, and old housing units are being modernized or replaced. Most of these developments are traceable to on-going programs implemented as a result of the Economic Opportunity Act of 1964. Health is an exception, of course, as most programs in this area were underway by 1960.

The improvement in income, however, cannot be interpreted as reflecting economic development nor the success of federal programs. First of all, much of the growth in employment, especially in recent years (918 more persons employed in 1973 than in 1970), is attributable to general economic expansion unrelated to economic developments on the reservations themselves. Second, unemployment rates remain extremely high. Third, manpower programs and reservation industrial projects have not been successful as both have exhibited high attrition rates. Lastly, a more extensive utilization of welfare programs accounts for a large portion of the improvement in income levels.

Relative to the state's population, the economic position of Indians in the state is substantially the same as it was in 1950. By whatever criterion employed, a tremendous disparity exists between Indians and non-Indians with the income gap proving particularly difficult to overcome. Indian income will remain low without a faster growth of employment opportunities in reservation areas, improvements in education and health not withstanding.

Tribal resources for generating development are severely limited. Land offers some possibilities mainly in the area of tourism and recreation but these by themselves are incapable of supporting the economic growth required. Mineral resources are important primarily for Fort Berthold with the remote prospect of becoming so for Standing Rock. While extensive

utilization of lignite would have significant effects on the employment conditions of both reservations, the degree of exploitation depends on steps taken to preserve the environment and the desire of tribes to benefit from their resources. At this juncture light industry appears to hold the most promise, but serious difficulties exist in this field as well, not the least of which is a lack of managerial expertise. An overriding concern in this area is the need for outside finance capital for tribal funds are simply inadequate for the task. Financing is available, however, from several federal agencies but thus far funds have not been forthcoming in the amounts necessary to overcome basic reservation problems. This is due partly to limited investment opportunities in small local markets and the costs of supplying geographically distant markets.

The status of Indians in North Dakota, then, remains disheartening as many problems persist in spite of the progress achieved. Looking toward the horizon, one wonders if the future will be brighter overall or simply a repetition of the past where certain facets of Indian life improve and others remain basically unchanged. However events may unfold, developments of the last decade indicate Indians themselves will play a more direct role in shaping their destiny. More than ever before, tribal spokesmen are concerned with the social and economic problems confronting their reservations and are actively involved in devising and campaigning for programs to cope with the needs of the people. In brief, a new ingredient is present - Indian leadership. This, perhaps, is the greatest legacy of the "War on Poverty" and the best hope for a brighter future.

APPENDIX A

TABLE 1A

INDIAN POPULATION AND TOTAL NORTH DAKOTA POPULATION, 1880-1970

	Indians	Total
1970[a]	13697	617761
1960[b]	11636	632446
1950[c]	10766	619636
1940	10114	641935
1930	8387	680845
1920	6254	646872
1910	6486	577056
1900	6968	319146
1890	8174	190983
1880	596	36909

[a]U.S. Department of Commerce, Bureau of the Census, 1970 Census of the Population, Vol. 1, Characteristics of the Population, Pt. 34 North Dakota.

[b]U.S. Department of Commerce, Bureau of the Census, 1960 Census of the Population, Vol. 1, Characteristics of the Population, Pt. 34 North Dakota.

[c]U.S. Department of Commerce, Bureau of the Census, 1950 Census of the Population, Vol. II, Characteristics of the Population, Pt. 34 North Dakota.

TABLE 2A

INDIAN POPULATION ON NORTH DAKOTA RESERVATIONS,
1950 AND 1970

	1950[a]	1970[b]
Fort Berthold	1763	1777
Fort Totten	1240	1833
Turtle Mountain	3306	4293
Standing Rock	3123	4500
Total	8316	12403

[a]Peter Dorner, "The Economic Position of the American Indians: Their Resources and Potential for Development" (Unpublished Ph.D. dissertation, Harvard University, 1959), Table 1, Appendix B, p. 268.

[b]U.S. Bureau of Indian Affairs, Aberdeen Area Statistical Data (Aberdeen, South Dakota: Aberdeen Area Office, 1970).

TABLE 3A

PERCENT OF DEATHS FOR LEADING CAUSES FOR INDIANS IN ABERDEEN AREA AND THE UNITED STATES ALL RACES FOR SPECIFIED PERIODS

	Aberdeen Area		United States	
	1954-1956	1965-1967	1954-1956	1965-1967
All causes	100.0	100.0	100.0	100.0
Accidents	16.6	20.5	6.1	6.1
Diseases of the heart	19.7	20.6	38.3	39.0
Malignant neoplasms	8.3	8.2	15.7	16.3
Influenza and pneumonia (excluding newborn)	8.6	7.4	2.9	3.4
Certain diseases of early infancy	7.3	5.6	4.2	2.8
Vascular lesions affecting CNS	6.7	5.6	11.4	11.0
Cirrhosis of the liver	1.4	3.8	1.1	1.4
Diabetes Mellitus	2.1	3.3	1.7	1.9
Gastritis, etc.	2.4	1.0	.5	.4
Homicide	2.0	2.2	.5	.6
Tuberculosis, all forms	4.8	2.2	1.0	.4
Congenital malformations	2.0	1.3	1.3	1.0
Suicide	.6	1.2	1.1	1.1
All other causes	17.6	17.1	14.2	14.6

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Government Printing Office, 1971).

TABLE 4A

BIRTH RATES PER 1000 POPULATION,
NORTH DAKOTA INDIAN POPULATION AND THE UNITED STATES

	1954-1956[a]	1959-1961[a]	1965-1967[b]	1969-1971
North Dakota Indian	34.4	47.9	44.8	...[c]
United States, All Races	24.8	23.7	19.6	17.7[d]

[a] U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Highlights (Washington, D.C.: Government Printing Office, 1966).

[b] U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Government Printing Office, 1971).

[c] Data are not available.

[d] Estimated on basis of data in U.S. Department of Health, Education, and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Government Printing Office, 1974).

TABLE 5A

INFANT DEATH RATES PER 1000 LIVE BIRTHS,
NORTH DAKOTA INDIAN POPULATION AND THE UNITED STATES
(Total Under One Year Old)

	1958-1960[a]	1965-1967[b]	1969-1971
North Dakota Indian	52.6	33.9	...
United States, All Races	25.9	23.6	20.5[c]

[a]U.S. Department of Health, Education and Welfare, Public Health Service, Indian Health Highlights (Washington, D.C.: Government Printing Office, 1966).

[b]U.S. Department of Health, Education and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Government Printing Office, 1971).

[c]Estimated from data in U.S. Department of Health, Education and Welfare, Public Health Service, Indian Health Trends and Services (Washington, D.C.: Government Printing Office, 1974).

TABLE 6A

COUNTY POPULATION BELOW POVERTY LEVEL
AND NUMBER OF PUBLIC ASSISTANCE RECIPIENTS BY RACE
FOR COUNTIES WITH LARGE INDIAN POPULATION, 1970

	Total[a] County Population	County[a] Indian Population	Population[a] below Poverty Level	Public Assistance Recipients[b] County	Indians
County					
Benson	8245	2002	2328	1016	690
McKenzie	6127	394	1379	209	95
McLean	11251	454	2538	410	147
Mercer	6175	61	1278	129	11
Mountrail	7437	785	2149	480	232
Rolette	11549	5842	3618	1874	1686
Sioux	3632	1520	1520	328	290
Totals	54416	11058	14459	4446	3151

[a]Calculated from: U.S. Census of the Population, 1970, Vol. I, Characteristics of the Population, Pt. 36 North Dakota, General Social and Economic Characteristics.

[b]Calculated from: North Dakota Department of Social Services, Statistics: Calendar Year Review 1970, Social Service Board of North Dakota, Bismarck, North Dakota. Excludes Medical Assistance, Foster Care, and General Assistance recipients.

TABLE 7A

PERCENTAGE OF POPULATION IN POVERTY
AND RECEIVING PUBLIC ASSISTANCE, 1970

Status	County Population	Indian Population
Below Poverty Level	27.0	50.0
Receiving PA	8.0	28.0
Impoverished and receiving PA	31.0	57.0

Computed from Table 6A on the assumption that 50 percent of the Indian population is impoverished.

TABLE 8A

ESSENTIAL RELATIONSHIPS BETWEEN INDIAN POPULATION
AND TOTAL SEVEN COUNTY POPULATION
(Percent)

	Total County Population	County Population in Poverty	County PA Recipients
Indian Population	20.3		
Indian Population in Poverty	10.2	38.7	
Indian PA Recipients	5.8	22.0	70.9

Computed from Table 6A.

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